**Questionnaire for Terminal Operators and Port Authorities Regarding Permissible Movements of Moored Vessels with an Emphasis on Safety & Efficiency (OCIMF Version)**

*To Whom it May Concern:*

*The World Association for Waterborne Transport Infrastructure, PIANC (*[*https://www.pianc.org/about*](https://www.pianc.org/about)*), has convened Working Group (WG) 212 to update WG-24’s report entitled “Criteria for Movement of Moored Ships in Harbors”.*

*We would be grateful if you could review and, to the extent possible, complete this questionnaire to assist in developing an understanding regarding motion limits for moored ships at your facility(ies). All information will be kept strictly confidential, without any reference to the respondents, and may only be used to update the information in the PIANC guidelines being developed by WG-212.*

*The completed questionnaire can be emailed to:* [*PIANCWG212@gmail.com*](mailto:PIANCWG212@gmail.com) *and/or* [*P.Bos@shell.com*](mailto:P.Bos@shell.com)*. If you wish to obtain an electronic copy of this questionnaire (MS Word) please send a request to the aforementioned emails. All questions can also be addressed to the provided emails.*

**Questions**

1. Have allowable motion limits for moored vessels been established for your facility(ies)?   
   If yes, please describe the applicable limits in all vessel directions: surge, sway, heave, roll, pitch, and yaw. If the allowable motion limits for moored vessels differ based on safety and operability considerations, please provide the applicable limits based on each consideration.

a. Maximum permissible motions of berthed vessels - related to safety considerations.

b. Maximum permissible motions of berthed vessels - related to operability.

2) Please provide any additional data or technical specifications on the following:

a. Terminal equipment (i.e., type(s) of cargo handling equipment and maximum vessels motions that can be accommodated by the cargo handling equipment).

b. Research on maximum allowable movements of vessels at berths (such as dynamic mooring analysis).

1. Does your Terminal suffer from downtime due to excessive movements of berthed vessels? (yes or no. If answer is yest can you provide the quantum of downtime).

4) How is downtime to excessive vessel motions determined? Perception or experience of the Captain / Terminal Operator or is based on measurements?

5) Are permissible motion limits for berthed vessels established for each berth or ship type?

1. Are you familiar with PIANC and PIANC guidelines? (yes or no)
2. Do you use PIANC’s WG 24 “Criteria for Movements of Moored Ships in Harbors” guidelines? (yes or no). Do you use other guidelines? If so, which one(s)?
3. Please state your terminal type (i.e., container, liquid, break bulk, etc.).
4. Please state the number and type of berths (buoys, jetties, dolphins, quay etc.) in use at your terminal.
5. Please state the type(s) of vessels mostly calling at your terminal.
6. Please provide Range of LOA, Draught, and Beam for vessels mostly calling at your terminal.
7. Please describe the loading/unloading equipment for cargo and people (cranes, ramp, link span, forklift, manifold, gangways, alarm systems, hoses, cables, trailers etc.) at your terminal.
8. Please describe operations/activities at your facility that might be hindered by movements of moored vessels? Are there different criteria for movements depending on the activity? For your reference, a sample of potential activities are provided below:
   1. Loading/offloading of cargo
   2. Passengers embarkation, but also general comfort on board
   3. Garbage, stores, luggage
   4. Bunkering
   5. Crew resting
   6. Maintenance
   7. Possible challenges of combining activities, and
   8. Other (please specify)
9. Please select (by highlighting or circling) the primary factor(s) causing motion of berthed vessels at your facility:
   1. Wind
   2. Current
   3. Waves (sea state)
   4. Passing vessels
   5. Other (please specify)
10. If a vessel must leave the berth, which situation is more frequent, the breakage of mooring lines, or possible damage to the hull of the ship / fenders? Are there specific berths within the terminal/port that experience disruptions more often than others? If so, what are unique about these berths (e.g., greater exposure to swells, passing ships, etc.)?
11. Which one of the measures listed below are employed at your facility(ies) to reduce movements/overcome challenges?
    1. Fenders
    2. Mooring configuration
    3. Position of bollards
    4. Type of lines, pre-tension, shore moorings
    5. Running engines continuously
    6. Other? (please specify)
12. Is it possible to plan/anticipate for movements at your Terminal/Port (e.g., movements are associated with specific seasons or climatic event etc.)? If so, please explain what measures are implemented to proactively prepare for anticipated abnormal movements.
13. Contact details for the respondent. Please kindly provide the following contact details. As previously stated, specific details for facilities will not be divulged and any information provided herein will be anonymized before publishing

Name of the Terminal/Port:

Location of the Terminal/Port:

Name of the respondent:

Email of the respondent:

Phone number of Respondent:

Do you allow a member of PIANC WG212 to contact you to follow-up on the information contained in this questionnaire?

Date:

Thank you very much for you time and cooperation.