## **Thanet Extension Offshore Wind Farm**

# Responses to the Examining Authority's First Written Questions on behalf of Port of Tilbury London Limited and London Gateway Port Limited

# Deadline 1 (15 January 2019)

This document responds to the Examining Authority's (EXA) first written questions and requests for information (EXQ1) issued on 18<sup>th</sup> December 2018. This is a joint response by Port of Tilbury London Limited (POTLL – 'Other Person' reference: TEOW-OP006) and London Gateway Port Limited (LGPL – Registration No. 20011837).

For clarification the following sections utilise the EXA's referencing and, for convenience, begin by setting out the Action Point title and specified action (in blue type). Only questions within Section 1.12 (Navigation, Maritime and Air) directed at all hearing participants, POTLL or LGPL are addressed herein.

Whilst POTLL and LGPL are responding jointly, the responses to certain action points are specific to the individual port circumstances. Therefore, for such actions separate responses are provided.

#### 1.12.1Navigability of the inshore approach to NE Spit pilot station

Several Interested Parties and Other Persons at Issue Specific Hearing 2 (ISH2) raised concerns about continued prudent navigation by deep draught vessels "north-south/south-north" inshore of the proposed Thanet Extension Offshore Wind Farm. Evidence on use of the "inshore route" by large commercial vessels restricted in ability to manoeuvre ("RiAM") by reason of length, type or draught (i.e. on passage between the Dover Strait and the Princes Channel or the Fishermans Gat; to take refuge anchorage at Margate Roads or Tonge anchorages; or to transfer pilots at North East Spit or on passage between the Dover Strait and the northerly extent of the deep-water channels into the Thames at Sunk) as follows:

a) what would be a reasonable maximum size of vessel by length, type or draught that is able to prudently use the inshore route at present in moderate MetOcean conditions?

### 400 metres length / 14 metres draft

- b) What is an estimated existing annualised use of the inshore route by "RiAM" vessels in baseline conditions of sea-room without the Thanet Offshore Wind Farm Extension (TEOWF);
- c) What would be a reasonably foreseeable annualised future use of the inshore route by "RiAM" vessels based on trend for change of vessel size using the Thames ports and anchorages as a whole in baseline conditions of sea-room without TEOWF;
- d) What would be a reasonably foreseeable annualised future use of the inshore route by "RiAM" vessels as a consequence of the reduction in sea room due to the pinch-point presented between the NE Spit bank and the proposed TEOWF Red Line Boundary plus 500m. proposed safety zone during construction and maintenance, with vessel size mix and volume of traffic using the Thames ports and anchorages as a whole as per baseline;
- e) What would be a reasonably foreseeable annualised future use of the inshore route by "RiAM" vessels as a consequence of the reduction in sea room due to the pinch-point presented between the NE Spit bank and the proposed TEOWF Red Line Boundary plus 500m. proposed safety zone during construction and maintenance with reasonable predictions of change of traffic mix based on trend for change in vessel size and number of vessels using the Thames ports and anchorages as a whole.

Response to 1.12.1 (b) to (e): The number of ship calls to POTL and DPWLG in the year to 30/11/18 was 3533 and 1054 respectively. An informed assessment of the number of these ships which routed via the inshore channel, or may do so in the future, with or without the TEOWF in place, requires historical information that neither POTLL nor LGPL receive or hold at present. POTLL and LGPL are, however, of the understanding that such information is available within the wider UK shipping and maritime community and are in discussions with other Interested Parties regarding its provision to inform the ongoing Examination process.

In responding to this question, please have regard to Annex 3 of MGN:543 – "Shipping Route" Template Notes and indicate whether continued use of the "inshore" channel by "RiAM" vessels is likely to be intolerable, tolerable on the basis of being ALARP (identifying the risk assessment and mitigation measures that control risk to ALARP) or broadly acceptable.

POTLL and LGPL are of the view that continued use of the inshore channel by RiAM vessels is likely to be intolerable.

#### 1.12.3 Conditions for Pilot Transfer Simulations

Responding to concerns raised at ISH2 about the continued ability to board pilots in adverse MetOcean and draught-constrained vessel manoeuvering conditions at the existing NE Spit pilot station, please identify whether the Bridge Simulation of feasibility of pilot transfer was adequate or not, covering the following points:

- a) to what extent can the ExA rely on the conclusions of the Simulation carried out?
  - POTLL and LGPL are of the view that the Pilot Transfer Bridge Simulation report is of limited reliability and have set out factors of concern in Appendix A to their Written Representations submitted at Deadline 1 in response to point 17 of the ExA's ISH2 Actions List (Document Reference: EV-003).
- b) how many simulated runs in different MetOcean conditions would provide a reasonably robust test of feasibility and operating risk?
  - To POTLL and LGPL's knowledge there is no set guidance regarding the number of simulation runs however POTLL and LGPL consider that in order to provide a reasonably robust test of feasibility, simulation runs for each of the 16 points of the compass (NNE) for at least 3 wind conditions (force 5, 7 and 9) would need to be carried out. Simulation runs for a range of these wind directions/strengths should then be carried out for varying ocean conditions (i.e. wind against tide) and fog in addition to scenarios relating to unforeseen events such as engine failure and the presence of leisure and fishing craft.
- c) what variables in MetOcean conditions would be reasonably representative of baseline normal operating conditions which would enable the NE Spit pilot station to remain "on station" without the proposed Thanet Extension?
  - The NE Spit pilot station will remain on station with any wind direction, in any tidal conditions up to and including Force 9 wind strength.
- d) to what extent the exercise represented "real world" conditions in respect to local knowledge and communications ability in English of the actors in the simulation and their learning gained by performing multiple runs during the simulation?

POTLL and LGPL consider that the simulation runs carried out:

- i) were poorly representative of the range of real world conditions that would reasonably be expected to be encountered over a reasonable study period; and
- ii) were carried out with reference to only moderate conditions and did not take account of potential extremes in circumstances.

For example, the simulation runs considered only 25 knot winds (pilots are known to operate in up to 75 knot winds); the presence of leisure or fishing craft was not taken in to account; and language difficulties (which can be encountered when vessels sailed by foreign crews enter the Thames) did not occur.

e) to what extent did the exercise incorporate impinging factors such as small vessels without AIS and crossing traffic?

POTLL and LGPL's review of the simulation report suggests that such factors were not considered.

f) are there any other relevant factors or considerations that should have been taken into account?

Yes, mechanical (engine/rudder) failure, foreseeable accidents, fog and the need for the pilot boat to abort the boarding process.

#### 1.12.11 Recommendation not to take forward additional risk control

Please comment on the concluding recommendation in the Navigation Risk Assessment (NRA) not to take forward additional risk control measures that had been considered in the NRA as further mitigation? [APP-089] NRA 8.5.3 Table 22 items 1, 2, 3 and 4 and Conclusions

POTLL and LGPL consider that the concluding recommendation in the NRA not to take forward additional risk control measures that had been considered in the NRA as further mitigation is additional evidence of the inadequacy of the NRA. This is a matter which POTLL and LGPL wish to discuss in more detail with the Applicant given that neither port was consulted on the NRA before the application for development consent was submitted.