Immingham Eastern Ro-Ro Terminal

Deadline 8 Submissions

Associated Petroleum Terminals (Immingham) Limited and Humber Oil Terminals Trustee Limited

Planning Inspectorate Ref: TR030007

8 January 2024

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Responses to Examining Authority's Further Written Questions (ExQ4)

1. The below table includes the IOT Operators' responses to questions from the Examining Authority's ExQ4.

Reference	Question to	Question	IOT Operators' Response
BGC.4.02	IOT Operators	Part 12 of the Energy Act 2023 Submit a copy of Part 12 of the Energy Act 2023, as referred to by you in [REP7-069].	Part 12 of the Energy Act 2023 is attached to these submissions as **Appendix 1**
DCO.4.06	Applicant, HMH and IOT Operators	**Requirement 18: potential amendment to construct Finger Pier IPM prior to commencement of construction of the proposed berths** As a prerequisite to minimising impedance to IOT operations and/or safety risks related to construction activity, if a DCO were to be made, should Requirement 18 be amended to require IPM for the Immingham Oil Terminal Finger Pier be constructed prior to the capital dredge and commencement of construction of the proposed IERRT berths?	The IOT Operators' view is that impact protection measures should be constructed prior to any IERRT operations, and ideally prior to dredging or construction of the IERRT so as to provide a degree of protection during the IERRT construction process. Impact protection measures should be provided with a view to minimising impact to IOT operations and vessels and the planning and approval of the IPM should follow the requirements of the Marine and Liaison Plan, which the IOT Operators have suggested should be included as part of the protective provisions for their benefit (as identified in the IOT sNRA). If this is not required, there is likely to be significant uncertainty over the delay and delivery of necessary protection (as well as the form of that protection) after the commencement of operations and consequent disruption to the IOT Operators' operations which are of national importance.
NS.4.04	Applicant and IOT Operators	**Likely extent of "impedance" to IOT Operations** Provide detail of any assessment that has been carried out for the "degree of impedance" to operations at the IOT Finger Pier [paragraph 1.10	At the time of writing, the Applicant has not approached the IOT Operators to engage in any assessment of operational impacts on the IOT. Even at this late stage, no response has been received to the draft SoCG

		in REP7-070] that could be caused by the presence of the Proposed Development across a range of met-ocean conditions, signposting relevant parts of the application from which assumptions are drawn, and what implications any impedance might have for the shipping of oil products having regard to the Energy Act 2023 and any relevant policy or guidance. This matter should be incorporated into a final and signed Statement of Common Ground (SoCG) between the parties.	returned to the Applicant prior to Deadline 7 [see Appendix 2 **REP7-070**] The IOT Operators have not been able to undertake that assessment themselves. However, based on the outcome of the simulations which took place on 13 and 14 December (which are commented on below in these submissions) it is evident that, even if IOT Finger Pier vessel priority is facilitated over the movement of IERRT vessels (and means provided to secure this), then the physical constraints imposed by IERRT infrastructure mean there will be a significant impact on the shipping of oil products at IOT However, the ExA will have noted that row 6 of Appendix 1 to the IOT Operators' D7 submissions [**REP7-070**] recorded the position reached in Issue Specific Hearing 5, whereby the Harbour Master Humber confirmed that IOT vessels would be offered priority. It is therefore suggested that the IOT Operators preferred protective provision paragraph 6 should be implemented to avoid any such impact. For the avoidance of doubt, those operational controls should supplement the extent of physical impact protection and other accommodation works the IOT Operators have argued for since February 2022.
NS.4.05	IOT Operators	**Relevance of closure of an oil products facility in Scotland**	The UK currently has 6 oil refineries comprising 1 in Wales, 1 in Scotland and 4 in England, 2 of which are in

		At the November hearings reference was made to the closure of an oil products facility in Scotland. Please provide further information of the closure of that facility and comment on any relevance that closure would have with respect to the need for and the operation of the IOT.	Immingham served by the IOT jetty complex. These figures even by themselves highlight the current importance of an uninterrupted two-way oil flow at IOT. IOT jetties already export considerable quantities of refined petroleum products to Scotland, however the planned closure of the INEOS refinery at Grangemouth will inevitably add further demand to products from Immingham (as the closest refineries to Grangemouth) and increase the importance of the Immingham facilities to Scotland and wider UK energy resilience.
NS.4.06	IOT Operators	**Outline Offshore CEMP tanker berthing protocols and liaison** Are you content with the drafting of the Outline Offshore CEMP pages 29 and 31 with regard to liaison and tanker berthing protocols respectively; and if not, why not?	Having reviewed the CEMP, which is still in its basic form, it is evident that there is still a considerable lack of detail regarding exactly how these areas will be managed without adversely affecting operations at the IOT. There is no information as to how the IOT will be involved with the Liaison process and tanker berthing protocol discussions between the SCNA and the Port of Immingham. This is especially important given the bespoke knowledge of oil transfer arrangements required to develop sufficiently appropriate policies and mitigations, to prevent incident and disruption to IOT traffic - despite the IERRT development occurring within meters of the IOT infrastructure. Priority berthing may assist the situation (providing it is duly secured) but will not alleviate all construction risks and delays.

			There is also no mention of who will ensure that the primary contractor adheres to any agreed protocols or how it will be secured and enforced.

Comments on navigational simulation runs for enhanced operational controls of 13 / 14 December

2. The Applicant arranged for further simulations to be carried out on 13 and 14 December. The stated purpose of those simulations, as outlined in a briefing note provided to the IOT Operators on 11 December **[Appendix 2]**, was to:

    - *"Study the effectiveness of Tugs when used as enhanced control measures at IERRT Berth 1*
    - *Consider the effect of the proposed impact protection on operations at IERRT and for coastal tankers at IOT berths 8 & 9*
    - *Understand the flow model effects due to the increased size of the southern IERRT pontoon"*

3. The IOT Operators attended those simulations at short notice in an attempt to further assist the Applicant with its proposals, despite the Applicant failing to provide any cost undertaking for the costs incurred by the IOT Operators in doing so.

4. At the time of writing no notes or materials have been provided by the Applicant to the IOT Operators in relation to these simulation runs, whether in draft or final form, despite the IOT Operators' express written request to the Applicant asking them to do so [**Appendix 3**].

5. The IOT Operators' comments on the simulation runs are provided in [**Appendix 4**].

6. The outcome of the simulations clearly demonstrates that the concerns which have been raised by the IOT Operators are justified and also does not resolve the failure of ABP to undertake a proper assessment of the Design Vessel to meet the requirements of EIA as submitted earlier. If anything, the latest simulations highlight the defects in the Applicant's EIA/NRA process.

Limitations of simulations

7. In reviewing the outcome of the simulations, it is important to note that the simulation model was unable to simulate the actual consequences that would arise after an initial allision by a vessel with the IERRT infrastructure. As a result all simulations that resulted in allision with any infrastructure were halted at that point and therefore resultant consequence and risk to IOT infrastructure posed by damaged/disabled vessels at the mercy of the ebb tide and wind is not included in any way in the simulations undertaken. The result of the simulations do not therefore accurately characterise the risk posed by the errant vessels.

8. The realities of such an allision at the location of IERRT with fast and complex tidal characteristics are several-fold. The arrest tug attempting to prevent the allision would be rendered useless as soon as the (Stena T-Class or other) vessel allides with a structure as the forces the tug is seeking to balance between the tidal and wind forces would be disrupted and as a result the loadings realised by the tug would likely increase significantly as either the tidal and/or wind forces fall out of equilibrium with the tug's power. The forces experienced by the vessel would therefore increase greatly, increasing the forces the tug would have to arrest (which it clearly failed to do prior to striking the infrastructure). Furthermore, in such a circumstance the tug master would primarily be concerned with the safety and protection of his own vessel and towline, and the possibility of girting (capsize of a tug which is very dangerous and often results in multiple fatalities).

9. The Applicant in the simulations in December 2023 and to date in the NRA has failed to address the consequences of a Ro-Ro vessel allision at the IERRT terminal. However, the impact of any RoRo ferry alliding even at slow speed, let alone up to 4.5 knots if an arrest tug failed to work, would potentially result in significant damage to the vessel's watertight integrity, stability and ability to remain afloat. As a result, there is a very real prospect of multiple fatalities as well as pollution, impact to other stakeholders and subsequent allision with the IOT and the national implications for the safety of the IOT Operators' personnel and equipment, as well as any consequences for the supply of fuel.

10. The simulations in December are the first time these types of 'failure scenario' simulations (of critical importance in determining extent of risk) have been undertaken in the examination and prove even with a vessel half the displacement of the design vessel that control measures favoured by the Applicant are insufficient.

11. Further, it should be noted that the simulations:

    a. Only covered arriving and departing of IERRT berth 1, which is arguably the easiest berth for arrival and departure with the most room for manoeuvre and did not cover IERRT Berths 2 and 3 which are inherently more difficult to berth on.

    b. Only covered the period of the manoeuvre where the RoRo has already swung north west of IERRT and is backing down head to tide, the arrest tug only being attached following the swing. The period prior to tugs being secured is arguably the most critical where the RoRo is across the tidal flow rather than aligned with it and also the most likely time that a failure would occur (whether that be engine or control system failure). Requests by the IOT Operators to simulate the arrest tug for the entirety of the RoRo berthing manoeuvre were denied, citing that simulating the period prior to the tugs securing would "open a can of worms".

    c. Were undertaken in the best possible, pre-briefed scenarios with good visibility, daylight, etc., and where the captains, pilots and tug operators were expecting and prepared for the failure.

Tugs as a single control measure

12. In respect of the effectiveness of tugs as an enhanced control measure the simulations clearly show that tugs of the size simulated would not be safe or effective to arrest an errant vessel bound for IERRT Berth 1. That was the case regardless of whether the vessel was the smaller "Stena T Class" or the vessel which more closely resembled the maximum displacement of the Design Vessel for which the Applicant seeks unfettered consent.

Tugs as a single control measure – T class

13. Of the ten runs of the Stena T Class vessel,[1] half of them resulted in the RoRo alliding with the IERRT infrastructure. The vessel could not otherwise be arrested, and it was agreed that the use of other possible controls such as the vessels' anchors would be unsafe with a tug attached forward. Even in such cases, the consequential effects of the allisions were not modelled.

[1] The ten runs were runs 1 to 6, and 6A to 6D. Allisions with IERRT infrastructure occurred on runs 3, 4, 6, 6C and 6D.

Tugs as a control measure –design vessel

14. In respect of the simulation runs of the vessel more closely resembling the design vessel, the results demonstrated a significant loss of control. Of eight runs using that vessel, six (three-quarters) resulted in the vessel significantly out of control[2]. Further it was evident in certain situations (including in predominant SW wind) the runs resulted in the loss of control of the design vessel and it drifting towards the inside of IOT river berths and the IOT Trunkway to seaward of the IOT Finger Pier – areas which have been afforded no impact protection by the Applicant.[3]

15. It is apparent from these late simulations that, should the IERRT development go ahead as planned, impact protection is absolutely required for the whole of the IOT infrastructure (see figure below showing the errant IERRT design vessel about to strike the IOT river berths with consequential damage to vessels alongside).

16. Had these simulations been undertaken when requested and when the IOT Operators had clearly and repeatedly identified the magnitude of the risks posed by the IERRT development, then further, more detailed control measures could have been identified, developed, tested and finalised by the Applicant.

17. However, given that (i) the DCO red line boundary does not extend sufficiently and that (ii) impact protection has not been identified as necessary to date for the IOT river berths and Trunkway to seaward of the IOT Finger Pier and that (iii) towage is clearly not a suitable control measure, then restrictive berthing limits for tide and wind speed / direction are required for IERRT vessels.

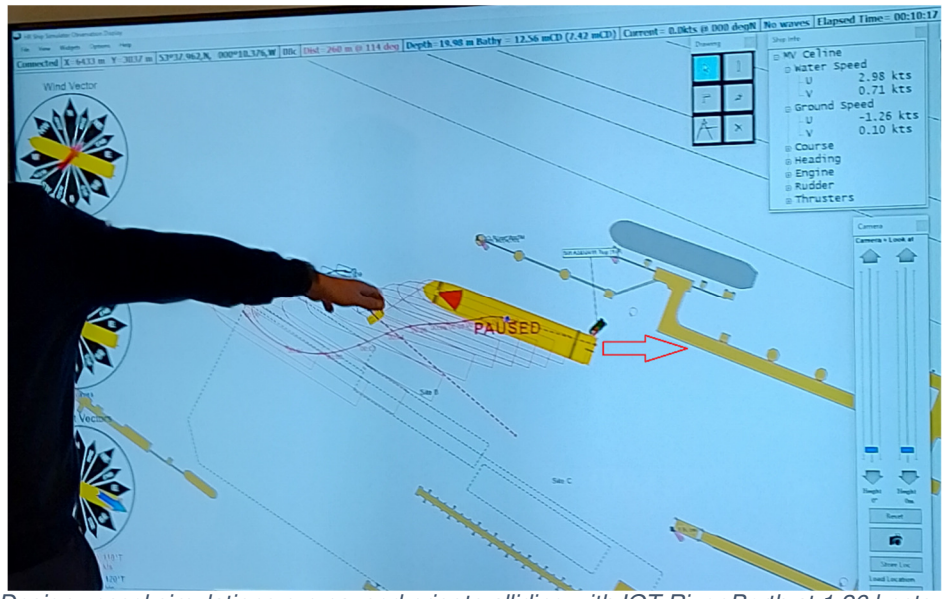


Figure 1: Design vessel simulations run paused prior to alliding with IOT River Berth at 1.26 knots.

[2] The eight runs for the design vessel were runs 7 to 14. Of those, runs 7, 8, 9, 11, 13 and 14 resulted in the vessel being significantly out of control, or the run was abandoned with the vessel in a dangerous position.

[3] The IOT Operators also received a letter at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

18. During the course of the simulations in December a Stena Master refused to continue with the runs as he stated that he would never operate in greater than 20 knots of wind or 2.5knots of tide - the run proved to be a failure. The IOT Operators note that there appears to be different operational parameters used between ABP the Applicant and Stena the proposed users of the IERRT facility which have not been set out to enable the ExA or affected parties to consider them. Where reliance is placed on procedural controls they should be understood, tested, developed and committed to as part of the DCO but this has not been done.

Impact on IOT operations

19. The Applicant had previously agreed to work with the IOT Operators to develop a scheme which would see the relocation of the "coaster" berth 8 from the southern aspect of the IOT Finger Peir to its northern aspect [**AS-027**]. The Applicant has since resiled from that position, as outlined in the IOT Operators' D7 submissions [**REP7-069]**.

20. The Applicant's simulations of December 13 and 14 were intended to demonstrate that IOT berths 8 and 9 (the adjacent berth for smaller vessels on the southern aspect of the IOT Finger Peir) could be accessed with the IERRT infrastructure and potential impact protection measures in place. However, the simulation did not cover IOT Finger Pier berth 9.

21. What the simulations clearly demonstrate is that access to the existing IOT Finger Pier is severely restricted. Four of nine runs[4] to IOT Berth 8 led to circumstances where vessel movements were at or in exceedance of the IOT Operators' operating limits specific to safety of approach or acceptability of landing speed alongside the berth. As a result, the simulations do not assuage the IOT Operators' concerns in any way, especially as there remains uncertainty in the accuracy of the flow modelling used by the Applicant (see below).

22. The runs frequently resulted in the IOT bound coastal tankers in unacceptable proximity to the IERRT vessel berths on IERRT berth 1. In line with the accepted position that IOT vessel would have priority, then it appears necessary to impose restrictions on use of IERRT berth 1 to allow for the safe arrival and departure of IOT coastal tankers.

Conclusions from December simulations

23. From the December simulations it can be concluded that:

    a. Tugs failed to provide effective control measures for half of the runs of the smaller Class T vessel.

    b. Tugs failed to provide effective control measures for three quarters of the runs of the vessel more closely resembling the dimensions and displacement of the design vessel.

    c. The proposed IERRT infrastructure and associated vessels provides a significant impediment to the operation of the southern berths of the IOT Finger Pier both by the presence of the pontoon infrastructure itself and when a RoRo vessel is berthed on IERRT berth 1. Because the tide sets onto and through IOT 8, it is necessary for tankers to adopt a wide angle of approach to the berth. The presence of IERRT severely restricts the southerly component required in the approach line, resulting

[4] Runs 15 to 23 concerned the IOT Finger Peir berth 8. Of those runs, 16, 17, 20 and 21 resulted in a "near miss" or otherwise operating at the upper limit of regulated practice.

in approaching tankers 'skimming' the side of a berthed RoRo by a distance which is too close in a riverine environment.

d. The simulation failed to address concerns related to IERRT berths 2 and 3.

e. The simulation failed to address concerns related to control failure by IERRT vessels manoeuvring for the IERRT berths 1, 2 and 3 before, during and after the swing.

f. The simulations did not address consequences should an allision occur by an IERRT vessel with any infrastructure.

24. Throughout the IERRT study to date, the preference has been to use 50 tonne tugs for IERRT vessel manoeuvres due to the smaller physical size and agility of these smaller tugs when operating in the very tight space parameters which the IERRT development permits, both between its own jetties and with Eastern Jetty. However, it became apparent during most simulations that 50 tonne tugs were inadequate and, as a result, for vessels better approximating a design vessel, 70 tonne tugs were deemed necessary. It is notable that the runs using the larger design vessel were also ineffective even when two 70 tonne tugs were simulated for those exercises. The need to specify certain sized tugs which are available in limited numbers and always in short supply during periods of high winds, would further detract from the practicality and add to the complexity of planning the arrival of each RoRo and the increased likelihood of a specific tug not being available when required or, when relied upon, delayed at short notice.

25. Further it should be noted that prior to the simulations the Harbour Master Humber's firm view was that a 50 tonne tug would be suitable to arrest IERRT vessels. This view was presumably based on either his judgement or the fact that 70 tonne tugs are not readily available on the Humber or preferred for the IERRT berth due their size and the limited room available. Either way, this view was not supported by the simulations and as such the nuances and complexities of dealing with large high windage and deep drafted vessels in a strong and complex tidal environment should not be left to the judgement of a single individual. His judgement with regard to these issues expressed earlier in the examination cannot therefore be considered reliable.

26. The simulations of 13 and 14 December can be seen as a clear example of the potential for error in assessments which might be made by individual decision makers during the operation of the IERRT. The consequences of such an error during the operation of the IERRT could be catastrophic. The IOT Operators' case is that these simulations clearly demonstrate the need for the mitigation measures they have consistently identified as being necessary for the safe operation of the IERRT.

Comments on the Applicants' Flow Modelling

*Summary of simulated flow conditions [**REP6-033**]]*

27. The Applicant submitted its "Summary of Simulated Flow Conditions" at Deadline 6 [**REP6-033]**.

28. There are several discrepancies in the reporting, in particular in clarifying where depth averaged currents are presented/discussed and where currents which vary in speed and direction through the water column (as experienced in the area of interest) are being presented/discussed. These include, for example: Section 2 which apparently describes only the depth averaged currents to draw the conclusions/key observations presented in section 2.2, whereas in Section 3 variation in speed and direction through the water column is recognised as a key issue. Similarly Figure 3.1- shows differences in speed/direction though depth, but Figs 3.2-3.5 are again depth averaged. Thus, when section 3.2 refers to flood flows in the model being more closely aligned to anecdotal reports than the measured data, it seems they may be conflating depth averaged model/measurement with upper water column experience likely to be the basis for anecdotal reports.

29. In meeting with HR Wallingford on 12 December they advised that all current validation and all currents used in the simulations considered the upper 7m of the water column only. Section 3.3 refers to standards for modelling accuracy quoting "Environmental Agency's 1998 guidance for estuarine modelling (technical report W113)". While this is a reasonable reference and does note the use of models to support navigation assessment, its purpose was to "establish best practice …in determining minimum residual flows to estuaries" – rather than best practice in computational flow models for input to navigation simulations.

30. Furthermore, the statement "In summary, the standards require that: [list of bullets]" is not correct. The numbers in the bullets come from Appendix A which is a "Typical Model Specification" and comes with a warning "It is provided as a model or template only. It should be adapted to suit particular studies and applications" and it provides "guidelines for required performance at validation stage".

31. The numbers presented in the report conflate the guidelines for Coastal Areas (e.g. speed +/- 0.1m/s, direction +/-10 deg) and guidelines for Estuaries (eg speed +/-0.2m/s direction +/-20 degrees). Meanwhile there is no mention in the report of the guideline values for water level or timing of HW.

32. In summary, while there are few widely recognised standards for numerical model accuracy for navigation simulations, reference to and comparison with values in Technical Report W113 should be seen only as guidance, not validation of model suitability.

*3D modelling for revised layout [**REP7-035]***

33. The Applicant submitted its "3D modelling for revised layout" at Deadline 7 [**REP7-035].**

34. The approach for dealing with existing piled structures (increased drag) is a fairly standard for this type of modelling but does not change flow direction or simulate smaller scale turbulence caused by these structures.

35. The model ignored piles from the proposed development including the impact protection screen which is upstream of the berths on flood tide. In meeting with HR Wallingford on 12 December they asserted that the pile spacing on the impact protection screen (ca 5-

7m?) and pile diameter (ca 1m?) meant that the structure had little impact on the flow up/downstream. This has not been validated by HR Wallingford. Section 2.3 floating structures:

a. The approach overall is a standard approach for larger scale flow models.

b. The use of a chamfered bottom profile for the high pressure zone is standard, to avoid numerical complications. However, the comment that there is likely to be no significant effect perpendicular to the stream should really be tested, as the current model will likely allow more water under the pontoon (especially at low water) than occurs in reality, thus less will be diverted around it. This effect is seen in the various plots in the Appendix, where higher flow changes are seen under the pontoons than around them. This could be demonstrated fairly simply with a small computational fluid dynamics (CFD) model of the structures and bathymetry, perhaps using the Telemac flows/water levels as upstream/downstream boundaries. In the meeting with HR Wallingford on 12 December and further clarified in follow up discussion on 13 December, HR Wallingford agreed to provide:

   i. Zoomed in area plots of current vectors around the end of the pontoon – at model grid resolution (ca 10m) – rather than current ca 50m resolution in the report figures. These should help to show whether they have captured the larger scale features of the flow in this area.

   ii. Plots showing actual flows and difference between full pontoons and no pontoons (i.e. present situation).

c. In the follow up discussion the IOT Operators requested HR Wallingford also source other evidence that the Telemac solution would give similar results to a CFD model of the same type of pontoon.

d. To date the IOT Operators have not been provided with any of the above and have therefore not had a fair opportunity to consider them and to comment.

36. The statement "*The revised IERRT layout does not change the assessment of the hydrodynamic effect of the IERRT for nearby maritime facilities. No changes in the effect of the IERRT on hydrodynamics are shown at IOT. The area of speed increase across the flow greater than 0.05 m/s is confined to the area close to the IERRT pontoon, within 30 m of the edge of the pontoon between the pontoon and the IOT finger jetty*." – seems to ignore the larger changes from LW to LW+1 and makes no comment on the changes in direction which are also seen. Furthermore, it is possible that the effect of changes to lateral flow are underestimated because of the approach used in the model to simulate the floating pontoons with a bottom-chamfered pressure field, no consideration of the effect of vessels at berth on the IERRT and ignoring the piles in the impact protection structures.[5]

*Navigation Simulation Study – Briefing Note [**Appendix 4**]*

37. The Applicant provided the IOT Operators with a briefing note on 11 December in respect of the simulations proposed for 13 and 14 December. That briefing note appears at [**Appendix 4**] to these submissions.

[5] The IOT Operators also received a letter from ABP at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

38. It is not clear from the report whether 15-20% was added to ebb current speeds in these simulations as reported as a requirement in flow modelling results, though in the meeting with HR Wallingford on 12 December they stated that 20% was added to ebb current speeds in the simulations.

39. Further it remains unclear the spatial/temporal resolution of flow data used in the simulations.

Flow modelling summary

40. The IOT Operators have sought to engage with the Applicant in respect of the flow modelling use in the simulations and were responsible for pointing out that the modelling did not include the updated pontoon layout that increased blockage of the tide and therefore increase current flows experienced around the IOT finger pier.

41. To date the flow modelling information provided by the Applicant has not been of sufficient detail with sufficient validation or verification for the IOT Operators to be comfortable that it accurately represents the likely flows that will occur once the IERRT is built. Further, none of the flow modelling to date includes up to three IERRT vessels which may be berthed at the IERRT.

42. The IOT Operators further note that note the DFDS Seaways Plc Deadline 7 Submission - Post-hearing submissions - Appendix 4 - Commentary on Simulations dated 7/11/23-08/11/23 [**REP7-047**] from a recently serving class 1 Humber Pilot questions whether the baseline flow modelling presented is accurate. The IOT Operators note that no details from serving Humber Pilots, to respond to these claims have been provided by the Applicant, which has had to rely on HES and Port of Immingham Harbour Masters, who do not navigate vessels in these areas, in the absence of any other pilot experienced in the area.

43. As a result, the IOT Operators remain concerned with the quality of flow modelling used to input into the simulations undertaken by the Applicant to date and are currently awaiting further details as requested from the Applicant in order to make an informed judgement on the Applicant's flow modelling.

Comments on the Applicant's ISH5 Action Points 3 and 4: Navigation Risk Assessment Update

44. Following ISH5 the Applicant was requested to address the following action points [**EV10-016**]:

    a. Action Point 3: Review and resubmit sections 9.7 and 9.8 of the NRA [**APP-089**], and review NRA and update accordingly to address how baseline NRA for Port of Immingham has been factored into the assessment.

    b. Action Point 4: Add as annexes to the NRA (to be submitted with AP3 above) the following documents:

        i. The Harbour Authority and Safety Board (HASB) December 2022 meeting minutes;

        ii. The briefing paper/report prepared for the HASB meeting in December 2022; and

        iii. the Applicant's responses to the IOT Operators' and DFDS' NRAs

45. These two action points issued by the ExA mirror questions and concerns raised by the IOT Operators which are documented in the IOT sNRA [**REP2-064**] (specifically at paras. 16, 60, 66 and at Table 1). Whilst the IOT Operators welcome the ExA requiring these details, the IOT Operators remain concerned that the Applicant needs to be required to provide such important details in such a manner and question whether the Applicant is sufficiently seriously in addressing the very real safety concerns raised.

Review of the amended NRA

46. In undertaking a review of Sections 9.7: Risk Assessment and Cost-Benefit Analysis and 9.8: Risk assessment: Applied controls **[REP7-012],** the Applicant has made multiple changes in other sections of the NRA and changed the layout (particularly around section 8 and 9 of the document).

47. This has necessitated a re-review of the whole NRA to piece together why multiple changes have been made. At this late stage in the examination, this is very concerning and the IOT Operators remain firmly of the view that too little information has been provided too late in the process for it to be effectively examined by stakeholders. It is open to question whether ABP has complied with EIA requirements in this respect.

48. The IOT Operators have now reviewed the changes identified in Deadline 7 Submission – Navigational Risk Assessment (Tracked) **[REP7-012**] and have detailed multiple concerns and comments on that document below.

Definition changes

49. At para. 1.4.13 / 1.4.14: The definition for "Tolerability" for the IERRT NRA has been updated and terminology changed to reflect "Receptors" with the IERRT NRA stating these are defined in the GtGP – however the GtGP does not refer to receptors and instead at section 4.3.18 refers to:

    a. Risks and the impact of identified outcomes should normally be assessed against four criteria; the consequence to:

        i. life (public safety);

ii. *the environment;*

iii. *port and port user operations (business, reputation etc); and*

iv. *port and shipping infrastructure (damage).*

50. In EIA terminology, receptors are commonly defined as the physical or biological resource or user group that would be affected by a project. The Applicant's NRA is seeking to conflate receptors with consequence types – for example a loss of life could occur as a result of a navigation accident and could be related to passengers on the IERRT Ro-Ro vessel in the event of a catastrophic allision with IOT infrastructure or loss of life to IOT personnel. IOT personnel and passengers of the IERRT Ro-Ro vessel under EIA terminology would be separate and distinct receptors. This error in updating the NRA demonstrates the lack of expertise within the Applicant's team for conducting complex NRAs and further flaws in the EIA process.

51. That is particularly concerning given the many statements made by the Applicant that it has used expert judgement to define acceptability of risk and cost benefit – all of which has been undertaken qualitatively by the Applicant, so that no specific details are available to the IOT Operators to interrogate and gain confidence in the results presented.

Tolerability / ALARP

52. At para. 1.4.16 a very significant change is made in the Applicant's NRA methodology in that it notes that:

> 1.4.16 Determining whether the predicted level of risk is acceptable requires a two-part test:
>
> - Firstly, is the risk below any unacceptable limit;
> - Secondly, if so, has it been mitigated to ALARP~~,~~
> - ~~Secondly, is the risk tolerable~~.

53. The IOT Operators noted in their sNRA at para. 16. [**REP2-064**] that the first test of a hazard in an NRA should be whether it is acceptable and then if not whether it can be made ALARP. The Applicant appears at para. 1.4.16 to have accepted the IOT Operators were correct in this but has not carried this change through the rest of NRA. This is important as the ALARP definition within the Applicant's NRA appears not be linked to any specific standards of acceptability and as such is a qualitative determination made by the Applicant against a qualitative assessment matrix in which ALARP is not defined. As such there still remains no empirical or mathematical justification for any of the results of the Applicant's NRA in relation to Tolerability or ALARP justification. This is directly addressed in the IOT sNRA in which a quantitative and transparent cost benefit analysis is presented at Sections 10, 11 and 12. This issue is further addressed below.

Statutory Harbour Authority interface

54. In Para. 3.2.5 the Applicant has made some changes in respect to interface between the Statutory Harbour Authority Marine Safety Management System and a new marine activity. The IOT Operators presume this has been added to address the ExA requirement to *"…update accordingly to address how baseline NRA for Port of Immingham has been factored into the assessment*." However, no details of the baseline

NRA have been provided and no information detailing how it has been taken into account in the IERRT NRA is provided. The updated NRA is silent in this matter.

Incident analysis

55. At para. 3.8.3 the Applicant has clarified that "Impacts with Structures" (defined as an allision in the IERRT NRA hazard table and IOT operators' sNRA) now predominantly relates to slow speed manoeuvring in confined areas. This is a particularly important category of incident and the IOT Operators have requested that analysis is provided related to the type and size of vessels proposed for the IERRT development (see para. 33 of IOT sNRA [**REP2-064**]) in comparable areas.

56. If impacts with structures are predominantly limited to confined dock areas with minimal tidal component, then it would be expected that where the navigation conditions are more challenging then impacts with infrastructure are both more likely and would have more significant consequences. The IOT Operators provided a detailed analysis of available incidents data (derived from UK Marine Accident investigation branch), which shows that Grimsby and Immingham have the highest incident rate for "Contacts" (termed an allision in the IERRT NRA hazard table and the IOT Operators' sNRA) of any UK Ro-Ro port / harbour (see para. 275 and Figure 57 of the IOT sNRA [**REP2-064**]).

> 3.8.3 The next most common accidents/incident category was 'Impact with Structure' which is predominantly reported ~~at~~around dock infrastructure where vessels are manoeuvring at slow speed in confined areas. The majority of these accidents/incidents have minor consequences. ~~These~~The location of MARNIS accident/incident reports are displayed at Figure 19.

57. No other changes are made to the Applicant's NRA section on incident analysis, despite the shortcomings identified by the IOT Operators. After the sNRA was prepared, the IOT Operators became aware of the impact protection installed elsewhere within the Immingham SHA area. Impact production has been installed at Immingham West Jetty Berth 4 (see sNRA Figure 8 for location) which is a small tanker berth.[6]

Example impact protection at Port of Immingham

58. It is understood that impact protection was installed at the Port of Immingham West Jetty Berth 4 following an incident where a tug allided with a pipe track and walkway (see Figure below). No details of this incident are available in the public domain (however as part of this Deadline 8 submission the IOT Operators request that ABP provide the details of that incident). This impact protection has been installed in an area with significantly less tidal flows than that experienced by the IERRT and is an example of a reactionary approach by Applicant in managing safety and risk.

59. Given the IOT Operators' specific concerns (embedded and justified empirically and transparently within its sNRA), the widespread concern shared by all third-party stakeholders, the failure of the proposed towage control measures and precedent set at Immingham West Jetty Berth 4, then impact protection for the IOT must be required prior to construction of the IERRT.

[6] The IOT Operators also received a letter at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

Figure 2: Impact Protection installed at Immingham West Jetty Berth 4 to protect pipe track.

IERRT marine works and future operations

60. Various changes are made in Section 4.2 marine works, which it is assumed relates to the change request, despite the Applicant noting that the IERRT NRA had be reviewed as part of the change request and no updates were necessary.

61. The IOT Operators note that at Para. 4.5.3 the Applicant has retained the principal design vessel for operation of the IERRT with parameters of 240m length, 35m breadth and a draught of 8m. As such any simulations undertaken with smaller more manageable vessels do not constitute worst case parameters for the EIA. The IERRT NRA therefore remains clear that the application is for operation of the IERRT with maximum design vessels and not smaller Stena T class vessels which are less than half the displacement and much more manoeuvrable than the vessel proposed for the terminal.

62. Minor changes are made at para. 5.3.3 which appear to have little bearing on the NRA outcome, except that whilst initially the IERRT development may be serviced by vessels currently visiting other terminals on the Humber Estuary, new tonnage is expected in the form of the IERRT design vessels. ABP has confirmed that the existing infrastructure used by Stena T Class vessels will likely be used by other operators, and as such the three berth IERRT will result in a net increase in large vessels movements of 2,190 vessels on the Humber Estuary.

Statutory Harbour Authority roles

63. Section 6 of the NRA update has a number of changes, most of which relate to clarifying the various roles between Port of Immingham and Humber Estuary Services. At 6.2.2

it is noted that the process of risk assessment forms part of both Humber Estuary Services and the Port of Immingham SHA, however it should be noted that at the time the IERRT NRA was carried out and engagement with stakeholder undertaken in the form of HAZID meetings, the ABP Harbour Authority Safety Board (HASB) had not approved the risk assessment methodology and risk acceptability / tolerability thresholds. As such during the course of completing the risk assessment up until Dec 2022 the presented methodology was not approved or in place for ABP ports or ABP developments.

64. Further, it is clear from the NRA of ABP's Immingham Green Energy Terminal DCO application [**APP-191 of TR030008**] that the methodology has been further refined and updated to address some of the deficiencies identified by the IOT Operators and other stakeholders, and further, the IERRT NRA has been updated in areas not being requested by the ExA**.**

Expert judgement

65. At para. 6.2.5 the Applicant has included further text extoling the virtues of expert judgement in HAZID, however the point of the HAZIDs should be to elicit local knowledge and information from stakeholders and local users. The Applicant is confusing the collation and review of this information by its own employees with the "group" think mentality who are rewarded for project delivery, with independent stakeholder engagement. At all stages of the risk assessment where stakeholders have been consulted, serious safety concerns have been raised, which the Applicant had variously attempted to discredit or ignore.

66. The Applicant has at all stages of the NRA process chosen its own qualitative judgement on safety as the applicant, developer, operator, consultant and regulator for the area over the concerns raised by local expert stakeholders.

Methodology

67. A fundamental point of disagreement to date between the IOT Operators and the Applicant mostly relates to the methodology employed by the Applicant, which was only put in place and agreed by ABP HASB in Dec 2022. The IOT Operators' view is that to date there has been insufficient detail (and a preference to qualitative judgement only by the Applicant) contained within their NRA. Indeed, the only quantitative, empirical, transparent and ultimately independent assessment of navigation risk for the IERRT development is that provided by the IOT Operators in its sNRA.

68. Table 15 appears to have been reformatted and not changed.

69. At Para. 6.3.7 the Applicant has changed the methodology, such that risk scores with moderate or low risk levels would no longer be taken forward for risk reduction. It is assumed that this is linked to the update to the application of ALARP discussed above and noted at para. 1.4.46 but no details are provided and, again, there is no transparency.

Changes to ABP NRA methodology and Port of Immingham baseline risk assessment

70. The Applicant has chosen to change the application of ALARP in its NRA to be following confirmation that the hazards have either met or not met the tolerability thresholds. The IOT Operators would note that the tolerability thresholds were set by ABP HASB up to 6 months after the HAZID workshops were conducted by ABPmer. As such the methodology and tolerability thresholds were effectively developed for the IERRT project and therefore it is not clear whether the existing baseline risk assessment for the Port of

Immingham, which includes the area of the IERRT development, remains in the old ABP format or whether it has been updated to the new format.

71. In any event, through the course of the IERRT consent from Scoping to PEIR to ES and ExA, the IOT Operators have not been invited to attend any hazard or risk workshop to update the Port of Immingham baseline NRA into the new ABP risk assessment methodology and tolerability levels, or any other hazard workshops for annual updates. As such the IOT Operators assume the baseline NRA has remained in a different format from that submitted by the Applicant for the IERRT. As the Applicant is the custodian of the baseline risk assessment and is required by the PMSC to engage with stakeholders to review and update it, and given this NRA has not been shared, despite numerous requests by the IOT Operators and also the ExA in ISH 5 Action 4, the IOT Operators can only assume that ABP as Applicant considers the differences in approaches and results of the baseline NRA to be at odds with the IERRT NRA and has chosen not to share it.

Risk matrices

72. In considering the risk matrices proposed by the Applicant the IOT Operators have been clear with their concerns, which are listed in the IOT Operators' sNRA at Section 2.1. In light of the change made by the Applicant in the order in which hazards are assessed, now updated to reflect the IOT Operators' suggestion, the Applicant considers that first a hazard needs to be determined as tolerable or not, and if it is not then the ALARP principle can be used.

73. However, the tolerability matrices presented in Figure 24 of the IERRT updated NRA (see figure below) have not been updated to classify an ALARP zone. This is at odds with the Port Marine Safety Code Guide to Good Practise [**REP1-016**] or MCA MGN 654 [**REP1-017**], which the Applicant states its methodology is based on, both of which clearly provide example matrices with "Intolerable", "ALARP" and "Acceptable" zones depicted. This approach is adopted by the HSE, see IOT sNRA para. 183, which references the HSE's Reducing Risks Protecting People. Further the IOT Operators' sNRA and the DFDS' NRA, both clearly characterise and define ALARP zones.

74. Not only therefore has the Applicant created arbitrary thresholds for tolerability, it has also failed to provide any threshold for ALARP which is also an arbitrary threshold. It has effectively chosen qualitative risk thresholds to define its risk appetite which do not relate to any published guidance and further put no limits to the approach taken to ALARP. Effectively the Applicant has defined what it considers safe or not without any transparency or clear parameters.

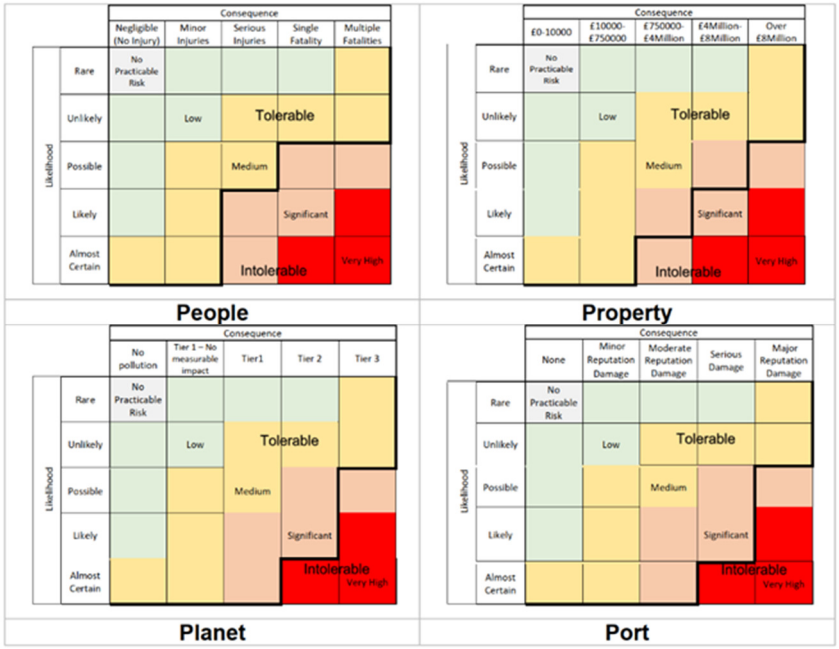
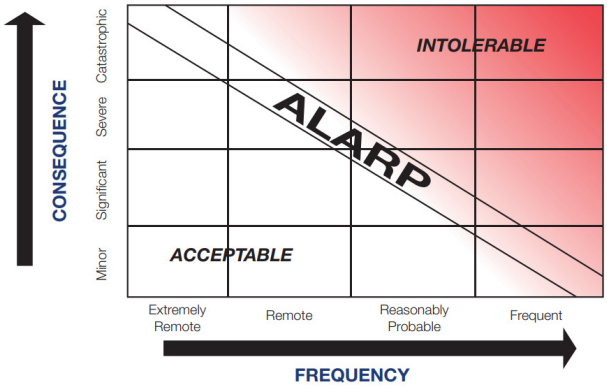


Figure 3: IERRT NRA Figure 24 Tolerability Matrices

Figure 2. Example Risk Matrix



C.5.4 HSE Example of Tolerability Matrix[15]

Risk Matrix Score	Tolerability	Explanation
7	Unacceptable	Risk must be mitigated with design modification and/or engineering control to a Risk Class of 5 or lower before consent
6	Unacceptable	Risk must be mitigated with design modification and/or engineering control to a Risk Class of 5 or lower before consent
5	Tolerable with Modifications	Risk should be mitigated with design modification, engineering and/or administrative control to a Risk Class of 4 or below before construction
4	Tolerable with Additional Controls	Risk should be mitigated with design modification, engineering and/or administrative control to a Risk Class 3 or below before operation
3	Tolerable with Monitoring	Risk must be mitigated with engineering and/or administrative controls. Must verify that procedures and controls cited are in place and periodically checked
2	Broadly Acceptable	Technical review is required to confirm the risk assessment is reasonable. No further action is required.
1	Broadly Acceptable	Technical review is required to confirm the risk assessment is reasonable. No further action is required

ALARP

Figure 4: Top: Example Risk Matrix from GtGP [REP1-016], Bottom: Example Tolerablity Matrix from HSE from MCA MGN 654 [REP1-017].

75. At para. 7.1.4 the Applicant has made further changes to the text which reinforce its view that it has made changes to the IERRT NRA methodology to accommodate the IOT Operators. However, when viewed in relation to requests made by the IOT Operators for a transparent risk assessment anchored in guidance and accepted standards of acceptability, the Applicant has not in fact responded to the concerns of the IOT Operators and others and has now introduced an even less transparent approach which has no basis in guidance or accepted standards. It has to be questioned why this has been done and at such a late stage in the DCO process: the IOT Operators are concerned it has been done in an attempt to overcome obvious shortcomings in safety, objectively considered.

Cost-benefit analysis and tolerablity meeting and other meetings

76. From para. 7.1.12 the Applicant has introduced additional annexes associated with risk assessment meetings that occurred on 04 Oct 22, 06 Oct 2022, and 07 Oct 2022 and a HASB meeting held on 12 Dec 2022. The attendees at the risk assessment meetings conducted were from the Applicant's team only (ABP employees) and very surprisingly no representation was requested or sought for the IOT Operators to attend.

77. At 7.1.13 reference is made to a Cost-Benefit Analysis and Tolerablity meeting, further details of which are presented in Annex F. On reviewing these meeting minutes it confirms that no cost benefit analysis was undertaken, and that qualitative judgement only was used to determine ALARP.

78. The IOT Operators therefore remain perplexed that the Applicant claims a cost benefit analysis can be undertaken in a qualitative manner, with no defined ALARP threshold, no presentation of benefits and no presentation of costs. At best the Applicant's cost benefit analysis undertaken can only be considered preliminary in nature and does not go to the level necessary for a fit and proper cost benefit analysis – as presented in the IOT Operator's sNRA.

79. In any event the meeting minutes do seem to indicate that based on a qualitative judgment, the cost benefit for impact protection was accepted as required and therefore met the ALRP definition as it recommended that the SHA should be able to require it. This recommendation is incongruous to the IOT Operators as both the HES and Port of Immingham Harbour Masters were present at the meeting and so whilst accepting they may need the measures, were happy to postpone requiring it until a future point in time, presumably following the occurrence incidents or near misses.

80. The IOT Operators also note that the ABP PMSC Designated Person (independently responsibly for marine safety within ABP) was not invited to attend (nor did they) the Cost Benefit Analysis workshop.

Cost benefit analysis

81. Fundamentally, and despite multiple requests from the interested parties, the ExA has had to require the Applicant to supply justification for its ALARP determination. It is now evident that the cost benefit analysis undertaken is severely deficient and does not stand up to independent scrutiny and as such the IOT Operators remain extremely concerned with the navigation safety of the proposed IERRT.

82. The Applicant at ISH 5 clearly asserted confirmation that the cost benefit analysis was contained within the hazard logs appended to the original IERRT NRA, however it has provided no evidence that this is the case.

83. This surprising absence of any evidenced cost benefit analysis is critical since it means that ABP has presented no standard or robust assessment for the proposed infrastructure nor has it even created or shared any basis with which to undertake a comparison of the costs of the protections sought by the IOT Operators. Its rejection of those protections on the grounds of cost makes no sense since ABP has not even troubled to assess the cost benefits of its own proposals and has no sensible basis of comparison.

Section changes to IERRT NRA

84. From Section 8 onwards the Applicant has made multiple changes to the IERRT NRA and changed the structure, layout and content despite the ExA questions only relating to Section 9.7 and 9.8. In the time available to the IOT Operators prior to Deadline 8 and with the Christmas and New Year periods, the IOT Operators are not able to provide a detailed review of all the changes made. It appears that the Applicant has amalgamated Section 8 and 9 into a new Section 8 and moved and updated sections of text to various annexes. This has made it difficult for the reader to follow the changes made and therefore their implication of the NRA.

85. Indeed, since the NRA forms an appendix to the Environmental Statement it should be consulted upon as such and these late changes suggest that a further process is necessary to ensure that there has been a fair opportunity of consultation and response.

86. It is not clear whether section 8.8. is a new section or a replacement and update of the old section 9.7 and 9.8. Further it is not entirely clear to the IOT Operators the extent to which this section has been updated based on the ExA requirements. There is reference to the cost benefit analysis meeting and that this has fed into determining which of the further applicable control should be applied to a hazard and a note saying that the hazard logs record the control applied. But as noted above there was no cost benefit analysis, except as a qualitative judgement by Applicant personnel, and also there is no cost benefit analysis of the ALARP justification for hazards contained within the hazard logs either noted as being at Annexes A, B, and C.

87. At para. 8.8.5 the Applicant notes that "*Where the cost of a further applicable measure was evaluated to be disproportionate to the benefit realised as a result of its implementation, the further applicable control was not carried forward and as such did not become an applied measure.*" The word used by the Applicant here is evaluated – and as such it is not "assessment" or "analysed".

Costs of risk control measures

88. The only costs supplied by the Applicant for any control measures (including the use of arrest tugs) relate to relocation of the IOT finger pier which was stated as being circa £35M (see Annex F). As this meeting was undertaken at the time when a relocation of the whole finger pier was the defined risk control measure, then the actual costs of a partial relation of the IOT Finger Pier as identified by IOT operators to facilitate value engineering at ISH 3 would be significantly lower. As a result the Applicant should have undertaken an iteration of the cost benefit analysis with the updated costs for the Change request – this however was not undertaken.

89. With the circa £35M cost supplied by the Applicant with regard to the IOT Finger Pier there is no detail on how these costs have been arrived at and more importantly what the benefits of the measure are, either individual related to a single hazard or collectively related to multiple hazards, never mind any operational benefits that the relation would bring to the impacts IOT would face as a result of the IERRT development.

90. It is noted that in Table 32 of the revised NRA that project specific adaptive controls are included as applied controls, which appear to include IOT Trunkway impact protection and impact protection. Without repeating the concerns already raised by the IOT Operators that many of the IERRT NRA "Applied controls" are embedded or duplicate controls, it appears the table mandates impact protection for the IERRT development.[7]

91. The Section 9 Summary has been updated at para. 9.1.3 (formerly 10.1.3) which now includes reference to HASB approval of the project and that as Duty Holder recommends and approved SHA adoption of the NRA.

Summary

92. The update to the IERRT NRA does not address the concerns raised by the IOT Operators that the Applicant has failed to undertake a fit for purpose cost benefit assessment to determine ALARP justification for IERRT navigation safety hazards. Whilst the Applicant has stated that cost benefit analysis was undertaken it is evident that the process undertaken is at best preliminary and entirely based on qualitative judgement of the Applicant's project teams and personnel (ABP employees). In no way does the further information provided reach the level needed to transparently and independently demonstrate that the documented and evidenced safety concerns raised by the IOT Operators (and other third-party stakeholders), which are also confirmed by the latest simulations, have been robustly and independently assessed.

93. The updates appear to have been made without regard to the need for fairness and consultation with regard to EIA, quite apart from the issues regarding the erroneous approach adopted in the ES with regard to the assessment of the parameters for the Design Vessel, and the requirements for the *Rochdale* envelope, set out previously.

94. The IOT Operators remain firmly of the view that the DCO should not be granted based on the safety concerns it has raised.

[7] The IOT Operators also received a letter at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

Comments on protective provisions for the protection of the IOT Operators

95. The Applicant provided comments on the protective provisions sought by the IOT Operators in their response to the ExA's Schedule of Proposed Changes to the draft Development Consent Order [**REP7-029**]. Those are provided at Appendix 4 of that document.

96. Those comments were not shared by the Applicant with the IOT Operators, and no attempt has been made by the Applicant to engage directly on those protective provisions with the IOT Operators.

97. ABP's responses to various aspects of the IOT Operators' proposed changes are addressed below. These include issues related to the existing license and lease agreements, the protections of the IOT Operators' parent companies, insurance requirements, land acquisition, Impact Protection Measures, the approval process for works, expense provisions, and the handling of property damage.

98. The comments provided below should be read together with the justifications provided in Appendix 1 to the IOT Operators' submissions for Deadline 7 [**REP7-070**].

Existing agreements

99. ABP has claimed that additional protections in the DCO are not required due to the existence of current commercial protections, including indemnities that are already in place. ABP further considers that the only additional protections required should be those relating to the construction phase and does not consider that the indemnities and protections afforded to the IOT Operators are required following the completion of construction at which time additional navigational controls will have been brought into effect, and to provide indemnities and other protections in perpetuity would fundamentally alter the existing commercial relationship between the Applicant and IOT Operators.

100. The existing agreements referred to are a lease relating to premises known as Immingham Oil Depot at the Port of Immingham (the IOT Lease), and a licence in respect of the Immingham Oil Terminal Jetty (the IOT Licence), between ABP, Humber Oil Terminals Trustee Limited, Total Lindsey Oil Refinery Limited and Philips 66 Limited. Associated Petroleum Terminals (Immingham) Limited is not a party to these agreements.

101. The existing agreements did not contemplate the IERRT Development now proposed and complementary protections are required to ensure that protections for the risks specific to the proposed development are appropriately secured.

102. ABP has also opposed any requirement to maintain insurance on the basis that the existing indemnities are already adequate and additional insurance is not required. Again, the existing agreements did not contemplate the IERRT Development now proposed and appropriate insurance is required.

103. As Applicant ABP has failed to identify to the Examining Authority any specific provision of the IOT Lease or IOT Licence which it suggests would be inconsistent with the protections sought by the IOT Operators as protective provisions. It submitted that the failure to identify conflicts is because there are none.

104. In the circumstances, there is no reason to depart from the principle, readily accepted in the development of National Significant Infrastructure Projects, that where a new development creates new risk for existing infrastructure, that new development should

provide all necessary assurances in the event of conflict between the two. That is what the protective provisions sought by the IOT Operators would achieve. If they are not provided, there will be a very significant impact on the operation of the IOT.

Parent company protections

105. ABP has expressed opposition to the inclusion of protections for the IOT Operators' parent company refineries in the PPs. ABP considers that this would constitute 'double indemnification' should it have to indemnify and protect parent companies of port tenants.

106. The IOT Operators have already explained that an impact on the IOT itself would have a direct effect on the parent company refineries' businesses, and it follows they should take the benefit of the indemnities. This is not a 'double indemnification', or double recovery, which typically refers to a scenario where two separate indemnities are provided for the same loss or liability, effectively compensating twice for the same incident. Including the parent companies in the indemnity provision instead extends the coverage to the parent companies for their distinct losses, clarifying ABP's obligations in the event of a loss to a parent company. The drafting of the indemnity provision requires that ABP only bear and pay "*a cost reasonably and properly incurred by the IOT Operators or the IOT Operators' Owners*" (accompanied by an invoice or claim). Therefore, the IOT Operators and the parent companies cannot claim the same cost under the indemnity.

107. Failing to provide an indemnity for the IOT Operators' Owners would conversely mean that the Applicant would avoid the costs associated with an impact on supply suffered by those companies.

108. The indemnity provision proposed by the IOT Operators clearly separates the liabilities of the IOT Operators and the IOT Operators' Owners, ensuring specific coverage for each entity's potential losses. This approach avoids the concept of double indemnification, as it addresses distinct risks and damages for both entities separately. Including the parent companies in the indemnity is justified, as it caters to unique risks and losses that could independently affect a parent company, without overlapping or duplicating indemnities.

Land Acquisition

109. ABP has also opposed any references to land acquisition within the PPs. They justify their opposition by highlighting that the DCO does not involve the acquisition of any land interests belonging to the IOT Operators. That is not objected to by the IOT Operators, noting that these protections have been included by the Applicant in their initial draft protective provisions submitted as part of the DCO application.

Work No. 3 (Impact Protection Measures)

110. In the context of Work No. 3, which pertains to Impact Protection Measures, ABP has raised objections to the requirement of providing these measures in all scenarios. They argue that such a requirement is contradictory to Requirement 18 and that it duplicates the statutory duties of HMH (Harbour Master Humber), thereby rendering it unnecessary.

111. This is a matter on which the ExA has had extensive submissions from all parties. Those are not repeated here, though the ExA is referred to the IOT Operators' most recent submissions [**REP7-069**] where the case for impact protection was summarised.

112. That of course should be read with what is said above in respect of the latest simulation runs of 13 and 14 December.[8]

Approval of works

113. ABP has also expressed disagreement with the requirement for certain works to be approved by the IOT Operators. ABP argues that this provision grants a veto power to the IOT Operators and interferes with the statutory duties of HMH, thus opposing its inclusion in the PPs.

114. The proposed drafting would allow the IOT Operators to suggest any reasonable modifications and / or protective works necessary to ensure its assets are protected. This is a standard provision included in many made DCOs in comparable circumstances and is subject to reasonable restrictions. The IOT Operators' approval cannot be unreasonably withheld or delayed by the IOT Operators and there is provision for arbitration in the event of dispute.

115. It is the IOT Operators' case that effective impact protection is required, and that (within the context of what is approved by the Secretary of State in any eventual DCO) it should be in a position to control the delivery of those impact protection measures through this provision.[9]

Expenses

116. ABP has proposed significant limitations on the recovery of expenses. These limitations pertain to both the scope of expenses covered and the method of payment.

117. The provisions sought by the IOT Operators mirror the common industry standard, as in those referred to in the IOT Operators' justification [**REP7-070, Appendix 1**], and should be preferred.

Damage to Property

118. Again, the provisions sought by the IOT Operators concerning damage to property can be seen as an industry standard [**REP7-070, Appendix 1**]. Those suggested by the Applicant should be disregarded.

Conclusions

119. In the absence of the protections sought by the IOT Operators, or any convincing or reasonable CBA, and given the EIA issues identified, the lack of provision of information and other cooperation by ABP and the results of the latest simulations lead to the conclusion that the application for the DCO should be rejected.

[8] The IOT Operators also received a letter at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

[9] The IOT Operators also received a letter at 4.54pm on Friday 5 January which included a large technical appendix on vessel impact protection structures which is still being reviewed by the IOT Operators.

Appendices

Appendix	Contents
1	Part 12 of the Energy Act 2023
2	Navigation simulation study - Briefing note – provided to IOT Operators on 11 December 2023
3	Letter APT / ABP 20 December 2023 – request for response on outstanding matters
4	IOT Operators' notes on navigational simulation runs for enhanced operational controls of 13 / 14 December

Burges Salmon