KEEPING BRITAIN TRADING

IMMINGHAM EASTERN RO-RO TERMINAL

Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 3 with Appendices
Document 10.2.39

APFP Regulations 2009 – Regulation 5(2)(q)

PINS Reference – TR030007

October 2023

Document Information

Document Information	
Project	Immingham Eastern Ro-Ro Terminal
Document title	Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 3 with Appendices
Commissioned by	Associated British Ports
Document ref	10.2.39
APFP Reg 2009	Regulation 5(2)(q)
Prepared by	ABP Project Team

Date	Version	Revision Details
10/2023	01 – Deadline 4	Submitted at Deadline 4

Contents

1 Executive Summary and Purpose

1.1 Issue Specific Hearing 3 ('ISH3'), during which consideration was given to the issue specific topic of **Navigation and Shipping (including any implications for the operations of the existing Port of Immingham and the Port of Killingholme), Onshore Transportation, Marine Ecology and Policy Considerations**, was held on Wednesday 27 September 2023 and the morning of Thursday 28 September 2023. In the Examination Timetable as appended to the Rule 8 Letter, the Applicant is required to prepare written submissions of oral cases made during ISH3.

1.2 At **Table 1** below, this document provides a summary of the submissions and responses made by the Applicant, Associated British Ports during ISH3 to questions which were raised by both the Examining Authority ('the ExA') and those interested parties which were present at the hearing.

1.3 At **Table 2** below, this document provides a summary of the action points arising from ISH3 and, where these action points fell to Associated British Ports as the Applicant ('the Applicant'), how these have been addressed.

2 Table 1: Summary of the Issue Specific Hearing 3

Item	ExA Question / Context for discussion	Applicant's Response
Agenda Item 1 – Welcome, Introductions and arrangements for the hearing		
1.	The ExA opened the hearing, introduced themselves and invited those parties present to introduce themselves.	Mr James Strachan KC introduced himself as acting on behalf of the Applicant. He would be supported by: • Mr Philip Rowell in relation to policy (ISH3 agenda item 2); • Mr James Hannon in relation to navigation (ISH3 agenda item 3); • Mr Simon Tucker in relation to onshore transport (ISH3 agenda item 4); • Dr Jamie Oaten in relation to ecology (ISH3 agenda item 5); • Dr Andy Pearson in relation to ornithology (ISH3 agenda item 5); and • Dr Elena San Martin in relation to underwater noise (ISH3 agenda item 5). Mr Strachan KC explained that Captain Mark Collier was present in his capacity as Dock Master for the Port of Immingham rather than as a member of the Applicant's team. Mr Strachan KC also explained that Mr Mike McCartain, ABP's Group Director for Safety, Engineering and Marine as well as the temporary designated person was also present at the hearing session.

		Finally, Mr Strachan KC explained that Mr Anders Peterson, Stena Line Head of Port Development, was also present.
Agenda Item 2 – Policy, statutory and other legal considerations for the Proposed Development		
2.	The ExA indicated that for this agenda item they would not be following the usual convention and wanted to hear the case of relevant Interested Parties – in this case only CLdN – in the first instance.	Following the lengthy submissions of CLdN – which the Applicant noted in many respects both went beyond, and contradicted, CLdN's written evidence submitted prior to ISH3 – the ExA indicated to the Applicant that it was acceptable to provide a high-level oral response only. On the basis that CLdN would need to provide its oral submissions in writing by Deadline 4, which the Applicant could then respond to at Deadline 5. Mr James Strachan KC, on behalf of the Applicant, agreed with this approach. Mr Strachan KC began by clarifying the question which the ExA had asked at agenda item 2a, indicating that the Applicant had understood that this question was seeking to explore the extent to which any unutilised capacity at the Port of Killingholme is capable of being considered as a potential alternative to the proposed development in policy terms. The question, as the Applicant understood it, was not about exploring whether there was actually such spare capacity. On this basis, Mr Strachan KC explained that his response would not tackle the question of the extent of any suggested capacity at Killingholme. Mr Strachan KC reminded the ExA that within the National Policy Statement for Ports (NPSfP) it is explicitly clear that in addition to growth matters there are at least two other elements that make up the established total need – resilience and competition. Any suggestion that meeting the need is simply about showing technical capacity to meet anticipated growth – which

		appears to be the approach being promoted by CLdN in their submissions - is wrong. The NPSfP is clear on this. Mr Strachan KC referred to paragraph 3.4.13 of the NPSfP and highlighted some of its content, namely: (i) competition between ports is welcomed and encouraged; (ii) competition drives efficiency; (iii) competition lowers costs; (iv) effective competition requires sufficient spare capacity to ensure real choices for port users; (v) effective competition also requires ports to operate at efficient levels rather than operating at full physical capacity. In addition to what is set out in the NPSfP, the need for the proposed development also includes the specific needs of Stena Line. Mr Strachan KC made clear that this is a perfect example of the competition aspects of need as expressed in the NPSfP. Even if there is unutilised capacity at Killingholme, that capacity is not an alternative to the proposed development as it does not meet the need, including Stena Line's needs. Mr Strachan KC went on to address the submissions made by CLdN in respect of the various legal cases that had been referred to. Indicating that he did not accept CLdN's characterisation of those cases and that the Applicant would respond in writing in due course, he made clear that the cases referred to were looking at the consideration of alternatives in a policy context where development needed to, for example, be justified by reasons of very special circumstances under greenbelt policy, or in respect of its impacts on a world heritage site. In such circumstances it is clear why the

		question of alternatives become material, but such circumstances do not apply to the consideration of the proposal. They are clearly distinguishable from the case at hand. Mr Strachan KC made clear that in respect of the proposed development there are simply not the exceptional circumstances which CLdN claim there are that would mandate the consideration of alternatives as a material consideration. Mr Strachan KC highlighted that CLdN have provided no proper response to the basic point that underutilised capacity at Killingholme, even if it exists, has not been offered to Stena Line on acceptable commercial terms to Stena Line, and even if it were Stena Line would be entitled to seek alternative capacity elsewhere as part of seeking to contribute to a competitive, resilient port environment to meet the need identified in Government policy. Mr Strachan KC then indicated that CLdN will no doubt try and spend a lot of time at the examination seeking to explore the extent of underutilised capacity at the Port of Killingholme. Leaving aside the fact that the ExA and the Applicant still do not know precisely how CLdN consider they can deliver the underutilised capacity which they claim, such an exploration is a red herring in relation to policy because it simply does not address the basic points relating to matters of need and alternatives set out in the NPSfP. Drawing to a close, Mr Strachan returned to what the NPSfP actually states in paragraph 4.9.1. Under the heading of 'Alternatives' the NPSfP explains first that in any planning case the relevance or otherwise of alternatives is in the first instance a matter of law, before then making it very clear from a

		policy perspective that the NPSfP does not contain any general requirement to consider alternatives or to establish whether the proposed development represents the best option. The policy position is, therefore, clear. There is no policy requirement to consider alternatives, and this is entirely consistent with what the NPSfP says about meeting need. The need to consider alternatives can arise in law but in respect of the proposed development: (i) none of the case law precedents CLdN refer to apply, and (ii) the 'no alternatives' requirements under the Habitats Regulations similarly does not apply. Even if, as a matter of law, there were a need to consider alternatives, the alternative must be a true alternative. The suggestion of a commercial competitive operator that it has spare capacity in principle in circumstances where that alleged spare capacity is not being offered on acceptable commercial terms to the very person or operator that would like such space, highlights that it is not a true or relevant alternative. Finally, Mr Strachan KC drew the attention of the ExA to CLdN's submission in REP2-074 where they state that they are not putting forward Killingholme as an alternative, instead they indicate they are putting forward a case solely based on need. Mr Strachan KC indicated that it is difficult to square that written statement with the submissions CLdN had made at the hearing, that spare capacity at the Port of Killingholme can be, and in fact is, a relevant alternative.

		Mr Phillip Rowell, on behalf of the Applicant, explained that Mr Strachan KC had dealt with all of the main points. He reiterated that the Applicant does not agree with the submissions given by CLdN which are wrong in a number of respects. Mr Rowell reiterated that the issue of need as set out in the NPSfP is more than simply considerations of growth, other elements such as resilience and competition are core components of the need for port capacity established in the NPSfP. Mr Rowell reiterated that need is not simply about making sure we have enough capacity to meet the growth. Need is not expressed in this way in either the NPSfP or within the case which the Applicant has put forward but appears to be the way in which CLdN are characterising it. Mr Strachan KC then invited Mr Anders Peterson on behalf of Stena Line to address the ExA.
3.	The ExA asked Stena to explain why it did not extend its Killingholme lease, asking whether (and how) Brexit had fed into these discussions and whether the position had moved in the past 18 months.	Mr Anders Petersen, on behalf of Stena Line, stated that it was very difficult to be a customer of CLdN when you want to engage and grow your business. Since 2000, Stena Line has operated two services out of Killingholme. In 2017 Stena Line began engaging with CLdN in an attempt to establish a long-term contract for these two services and sustainable growth from the Port of Killingholme. These conversations, however, were met with CLdN seeking to impose limitations on the future growth of Stena Line's unaccompanied trailer business. It was clear that CLdN either wanted to limit competition or did not have any space for Stena Line to grow. Negotiations ended in 2019 as a result of Brexit pressures. In May 2021, CLdN cancelled the contract for the Stena Line's Rotterdam Ro-Ro service,

		meaning that Stena Line had to open discussions with ABP which resulted in the use of the Immingham Inner Dock for this service from January 2022. Stena Line wants to establish its own base on the Humber, equivalent to CLdN and DFDS in order to freely develop their business without limitations imposed by a commercial competitor. Stena Line wanted a base to grow, provide competition and ensure reliance in the market. CLdN were then invited to respond specifically to any points which Mr Peterson had made. The first part of CLdN's response sought to respond to points raised earlier by Mr Strachan KC and Mr Rowell. The Applicant's response to CLdN is summarised in row 5 of this table.
4.	Following CLdN's response, the ExA asked, putting aside any commercial considerations, whether sufficient capacity to meet Stena's needs (both in terms of how it has been operating and how it might wish to expand) could be provided at the Port of Killingholme.	Mr Anders Peterson, on behalf of Stena Line, made clear that CLdN had not been able to demonstrate this since 2017. Mr Peterson made it clear that there is no proposal on the table. He added that Stena Line is not aware of what any new proposal would look like if CLdN were to make a further proposal. This is therefore impossible to answer.
5.	The ExA then allowed the Applicant to provide a response to various points that had been raised.	Mr James Strachan KC, on behalf of the Applicant, made it clear that there had been no concession on any need point by the Applicant. Mr Strachan KC highlighted that insufficient detail had been provided by CLdN as to the alleged physical capacity available at Killingholme which CLdN are now suggesting is an alternative. Noting that the ExA had asked for a plan and information, and also the fact that the NPSfP indicates the onus is on the person proposing the alternative to provide the evidence for its suitability, Mr Strachan indicated that the Applicant would consider and

		respond as necessary to any further information to be provided by CLdN in this regard. Mr Strachan KC concluded that any attempt to divorce physical capacity matters from commercial reality (as appeared to be suggested by CLdN) is at odds with what is set out within the NPSfP. For an operator such as Stena Line, the issue is not just about physical capacity, but also whether any such capacity, if actually available, is available on commercially viable terms and able to be secured for the long term. This is not the experience of Stena Line at Killingholme. **Post Hearing Submission** This was in response to the suggestion made by CLdN that the Applicant had made a concession that its case was simply about providing competition and resilience and accommodating the needs of Stena Line. No such concession has been made by the Applicant. Although these are all important matters that contribute to the Applicant's case, growth matters are also an important part of the Applicant's case.
6.	The ExA asked the Applicant what it meant by referring to 'unconstrained river berths' within the Planning Statement.	Mr Philip Rowell, on behalf of the Applicant, indicated that this, in effect, is shorthand for a berth located on the river – i.e. one that did not need to be accessed through a lock entrance or was located in an enclosed dock – that either has suitable marine access or which can be provided with such access in a relatively straightforward way.
7.	The ExA asked the parties whether there were any other policy points which they would like to make.	Mr Philip Rowell, on behalf of the Applicant, explained that in order to be found sound and be able to be adopted the local development plan had to be shown to be contributing to the achievement of sustainable development. As a result of this, and the rigorous review and adoption process which had to be followed to find the local plan to be sound, it had

		to be concluded that a development which came forward and was found to be in accordance with the development plan was sustainable development. In this regard, the Applicant's Planning Statement demonstrated the proposed development was in accordance with the development plan, a position which had not been disputed by the local authority. **Post-Hearing Submission** CLdN will provide a summary of its position on policy at Deadline 4. The Applicant will provide a response to this at Deadline 5, which the Applicant will use as a further opportunity to set out the policy case in favour of the proposed development.
8.	The ExA invited comments regarding the IERRT development's compliance or otherwise with the UK Marine Policy Statement 2011 and the East Inshore and East Offshore Marine Plans 2014.	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant's position on this matter was set out in the Planning Statement. He highlighted that the various paragraphs and sections of the policy documents referred to by the Interested Parties refer to resilience and freedom of navigation matters, including the freedom of navigation for all including those seeking to operate new and additional facilities. The Applicant's position is that it does not conflict with the sections cited, and also that several of these sections actively support the proposed development.
9.	The ExA invited the parties to highlight any further relevant national policy statements.	Mr James Strachan KC, on behalf of the Applicant indicated that the Applicant would respond in due course to any specific points being made by Interested Parties, as and when, they were put in writing. In respect of different cases referred to by Interested Parties, the Applicant would liaise with the other parties as necessary to provide information to the ExA.

10.	The ExA asked whether there was any relevant legislation, aside from COMAH Regulations which should be considered when assessing the safe relationship between the proposed development and the IOT.	Mr James Strachan KC, on behalf of the Applicant, stated that, beyond the COMAH Regulations, there was no further relevant legislation. The only other issue which was in contention between IOT Operators and the Applicant related to the Applicant's NRA and what it addresses.
11.	The ExA asked for clarification of the leasing and legal relationship between IOT Operators and the Applicant, and what implications this would have for any alterations which were to be made to the IOT.	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant would discuss internally and with IOT Operators, in order to provide clarity on the position.
12.	The ExA asked what the purpose of the Harbour Improvement Statement (submitted with the Application) was.	Mr James Strachan KC, on behalf of the Applicant stated that the Harbour Improvement Statement had been provided in order to meet the requirement to provide such a statement set out in the relevant regulations. In its statement, the Applicant has set out how the requirements for such a statement set out in the relevant regulations are met. The requirement for the statement and what needs to be shown, however, does not impinge, contradict of undermine what is set out in the NPSfP, which sets out the Government's policy context against which the specific requirements of such a statement need to be considered.
Agenda Item 3 – Navigation and shipping effects of the Proposed Development		
13.	The Applicant addressed the ExA.	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant had continued to discuss the Application with IOT Operators following the production of the two additional NRA documents. As a result of these discussions, the parties had agreed to address the IOT NRA in the

		continuation of ISH3 on Thursday 28 September 2023 to the extent that this would be necessary. Should common ground be reached, the parties would request that the NRA be discussed at a later hearing. IOT Operators and the Applicant hoped to reach agreement by Deadline 4, but any agreement would also be contingent on the ExA accepting any resultant change request into the Examination.
14.	The ExA asked the Harbour Master and the Dock Master for their views as to the purpose of the NRA that had been submitted by the Applicant, and whether this was considered a working or final document.	Cdr Paul Bristowe, head of Marine, Humber at ABP and on behalf of the Applicant, stated that he is the line manager for both the Harbour Master and the Dock Master. His remit included the co-ordination of resources and overall accountability. Mr Andrew Firman, Harbour Master for the Humber, stated that the purpose of the NRA is to capture new hazards and risks, and to rate those risks accordingly. He added that the NRA is a living document which has captured learnings from different workshops. The Applicant has then fed into the NRA their own formal risk assessment for the Port and any controls and procedures that will feed into the Marine Safety Management System. Cdr Bristowe, on behalf of the Applicant, agreed with the Harbour Master. He added that the NRA is a baseline to assess the viability of the scheme which then acts as a springboard to ensure safe operations once this is established.
15.	The ExA asked to be taken through the different areas of responsibility between the Harbour Master and Dock Master in relation to a hypothetical navigational incident at the Immingham Outer Harbour.	Cdr Paul Bristowe, on behalf of the Applicant, indicated that such incidents were very dynamic. The vessel's master would react to what they see on a case-by-case basis, with each situation to be judged on its own merit. In the context of an allision between two vessels as described by the ExA, Cdr Bristowe emphasised that this would be a very significant incident,

		where consideration would need to be made as to whether the berths need to be closed. The HES and Dock Master teams would be alert and actively dealing with the incident, with safety and containment as the main priorities. The aspects regarding business continuity would be the responsibility of senior members within the Humber leadership team. The senior members would be in constant communication with the Regional Director, who would have the ultimate decision-making authority. The marine team are authorised to make decisions on immediate safety. The information that they provide would then be used by the Regional Director to govern decisions regarding business continuity. It was difficult to provide a clear answer as to what would be done, as there would be a wide range of fact specific considerations which would have to be made for determining the most appropriate approach. In the event that, during this time, other vessels are moving towards Immingham, Cdr Bristowe stated that this would be the responsibility of VTS. The data centre team would be responsible for scheduling other inbound vessels that are not within the immediate proximity to the Port. He emphasised that vessels would only be brought in from sea when safe to do so. Cdr Bristowe stated that although this discussion related to a hypothetical scenario, he wanted to emphasise that there had been no impacts between a DFDS vessel and the western jetty.
16.	The ExA asked the Applicant if it considered there to be any similar	Mr James Hannon, on behalf of the Applicant, started by stating that the power of the Secretary of State to intervene in a shipping incident which

	relationships between Ro-Ro berths and petrochemical infrastructure	involved a risk to life or a hazardous substance (as highlighted by DFDS) was a last resort. The primary response remains with the Statutory Harbour Authority and the Harbour Master. Mr Hannon provided examples from Purfleet Ro-Ro Terminal, the Port of Milford Haven and the Port of Portsmouth. Mr Hannon's notes that formed the basis of his oral representations and the photos that were presented to the ExA have been appended to this document **(see Appendix 1)**. **Post hearing submission:** The Applicant has provided an additional response to this question at N2.207 of **document 10.2.38 - Applicant's Response to ExQ2 [with Appendices] - submitted at Deadline 3**.
17.	The ExA asked the following questions in relation to the approach taken in preparing an NRA, rather than the conclusions of an NRA: 1. Is it correct that ALARP and tolerability/ acceptability are inseparable concepts? 2. Is ALARP ultimately a matter for the judgement of a duty holder? 3. Can there be an objective standard on tolerability?	Mr James Hannon, on behalf of the Applicant, stated (in relation to question 2) that accountability is solely the responsibility of the Statutory Harbour Authority (SHA) as the duty holder under statute. Mr Timothy Aldridge, on behalf of the Applicant, stated as follows: Question 1: Whilst interrelated, these are not the same. The concern of tolerability speaks to a threshold at which an organisation considers that a risk, by reference to consequence and frequency, is acceptable or not. The term ALARP, by contrast, is to do with ensuring that an identified risk is adequately mitigated. Mr Aldridge provided an example of driving a car. The concept of tolerability would refer to the driver deeming that the risk of an accident is sufficiently tolerable for them to still undertake the journey, whereas the action of wearing a seatbelt serves to make the outcome of that risk ALARP.

	4. Is a 50-year period an acceptable term over which to assess navigational safety?	Question 3: It is best to set the relevant standard of tolerability in consultation with the SHA and with regard to the individual consequence descriptors against the frequency/likelihood descriptors. This allows you to delineate where the thresholds will sit for each receptor, as logically, this threshold will vary based on the different receptors as the consequences are different. For example, there may be a higher risk tolerance (with respect to position on a matrix) for a risk to business than for a potential risk to life. Each receptor needs to be considered separately in its own context, otherwise you will never make a fair comparison. An example can be drawn in considering tolerability against life and environment, as one cannot and should not try to equate an event such as an oil spill to the risk of injury or death. Because of this nuance, and the variance in ports across the United Kingdom, there is no industry standard on what tolerability is. Instead, SHA's are empowered to determine this threshold. This is also why we have seen differences between the NRAs which have been submitted. DFDS does not delineate between the different receptors in their tolerability assessment, whereas the Applicant's NRA does. Further the DFDS NRA averages risk outcomes across each receptor where the Applicant's NRA considers each receptor individually which provides far greater assurance. Regard should be had to each of the individual receptors, as treating these holistically through an average can result in an intolerable component of a risk being hidden. An example might include the risk of a pilot drowning while boarding a vessel, the environmental and property damage consequences will be negligible which could artificially reduce the perception of the risk through an averaging approach.

		Question 4: Risk is best assessed in a way which can be easily understood. When engaging with a room full of people, assessing risk in terms of how many thousands of years makes the risks hard to conceptualise for the average person. In ensuring that risk is assessed correctly, there are two approaches that can be taken: • A quantitative approach, which looks at risk from a statistical basis. • A qualitative approach, which describes the nature and impact of the risk from subject matter experts. The qualitative approach was used within the Applicant's NRA with a focus on consultation of subject matter experts and port stakeholders. Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant had deliberately avoided answering these questions in a way which discussed the findings of the relative NRAs, which DFDS had not. Mr Strachan KC pointed out that the Applicant's NRA involved consultation with a wide range of stakeholders, whereas the DFDS NRA did not.
18.	The ExA invited the Applicant to provide further explanation of tanker traffic within the footprint of the proposed development.	The Harbour Master stated that the graphic displayed by the ExA likely includes bunker barges in addition to tankers. He states that bunker barges are classified as tankers within AIS, but that he would imagine that the vast majority of this movement would be bunker barges travelling to Grimsby.
19.	The ExA asked why berthing at berth 3 has not been simulated more extensively.	Mr Mike Parr, for the Applicant, explained that there had been four separate series of simulations. The first simulation exercise was conducted in 2021 on the basis of a four berth scheme which was no longer part of the project.

		During this simulation, the majority of the runs carried out were for berths 3 and 4. The Applicant has this data and will submit this data in due course. **Post-hearing submission** Mr Parr clarified the reasoning further at Item 33 below during ISH3. In this response, Mr Parr confirmed that berth 3 was adequately simulated during the 2021 simulation exercise.
20.	The ExA asked for an explanation of how potential hazards such as the Eastern Jetty had factored into the decision to re-orientate the berths.	Mr Mike Parr, on behalf of the Applicant, stated that there had been no specific consideration of the Eastern Jetty as part of the decision to re-orientate the berths from 306 to 300 degrees. Instead, the re-orientation resulted from discussions with maritime experts about the direction of flows. Considerable data collection and work was undertaken to understand the flows in the location of the IERRT. Whilst this showed that the flows were complex and varies considerably, this determined that the average flow was 300 degrees. Therefore, the optimum orientation for the berths was also 300 degrees. During the simulations which were conducted during the summer of 2022, discussions around whether a berth orientation at 306 degrees might be more optimal. The simulations demonstrated to the various stakeholders present that the 306 degree orientation led to a series of failed and aborted runs, as well as creating a situation in which the current could pin the vessels to the berth. This would be challenging for pilots to safely operate the vessels. Therefore, a 300 degree orientation was considered optimal, with good evidence that the berths should be orientated towards the flow, and a significant disadvantage of a 306 degree orientation.

21.	The ExA asked what the consequence of the 300 degree orientation bringing vessels closer to the Eastern Jetty and its tug berths.	Mr Mike Parr, on behalf of the Applicant, stated that the proximity of the Eastern Jetty provides some challenge when approaching, but that the same applies to DFDS vessels approaching the Immingham Outer Harbour due to the proximity of the Western Jetty. It is anticipated that training for pilots and PEC holders would reflect this. A similar stage to the manoeuvre outlined by a DFDS Master earlier in the hearing would be trained, with the Master holding the vessel steady in the current prior to manoeuvring towards the berth, so as to be certain that they have full control of the ship and understanding of the elements before setting themselves back towards IERRT terminal. The Harbour Master confirmed that the principle of getting a vessel under control is absolutely key and that he also agreed with this step being critical to the manoeuvre, as had been outlined by the DFDS Master. Following Mr Kim Nielsen, on behalf of DFDS, describing an incident in which a vessel left IOT berth 6 and had got into difficulty, the Harbour Master stated that that incident had occurred in a 20 knot wind from the East. Those conditions could not be described as benign, but even so it was the actions of the bridge team which had caused the vessel to end up where it did. Mr James Strachan KC, for the Applicant, stated that two Stena Masters with experience of navigating these ships had been present at the simulations and were content with the results. Mr Parr, on behalf of the Applicant, and in reply to criticisms by DFDS of the navigation simulations which had been submitted, stated that the manoeuvre which was most similar to the manoeuvre for IERRT was that undertaken by vessels entering into Immingham Lock. That manoeuvre

		takes place about 300 yards from the proposed swinging area in which the pilot would have to undertake the stationary position and swing for IERRT. Mr Parr explained that HR Wallingford consider the most conservative and best approach to simulations is to not include wind shadowing in a feasibility study as it will show a more positive outcome than the conditions which had been simulated in this case. Mr Lars Van Dee, a Stena Master on behalf of the Applicant, stated that the types of flows which he had experienced in the simulations were almost the same as at Killingholme, and that berthing manoeuvre had been undertaken safely for 22 years. The position of the vessel and berth, as well as the tidal flows, felt very similar to Killingholme.
22.	The ExA asked whether the Applicant had undertaken any further simulations which it would be willing to share.	Mr James Strachan KC, on behalf of the Applicant, stated that no more simulations had been conducted since the Application had been submitted, but that the Applicant would consider providing the simulations undertaken previously. Further simulations would only be undertaken if the Applicant was made aware of different conditions which needed to be simulated.
23.	The ExA asked the Applicant to expand on its submission that the existing conditions at Immingham are challenging, and that the new IERRT terminal would not present any more of a challenge that DFDS's manoeuvre into the Immingham Outer Harbour.	Mr James Strachan KC, on behalf of the Applicant, stated that this depended on what was meant by the word 'challenging'. Challenging manoeuvres require skill and control, relying on a number of factors including training and the use of tugs. The current operating conditions at the Immingham Outer Harbour are challenging, but that facility had been operating safely for over 20 years.
24.	The ExA asked whether the SHA considered that it had a good	Mr Mark Collier, the Dock Master, confirmed that ABP have a good idea of the initial operating envelope. It was not proposed that there would be

	understanding of the initial operating limits for the development.	different operating limits for each of the proposed berths, and parameters such as the wind parameter could potentially be adjusted over time. Cdr Paul Bristowe, on behalf of the Applicant, stated that sufficient simulations had been undertaken in order to inform accurate design of the IERRT infrastructure. Before commencing the operational phase, additional simulations would be conducted to establish operating limits and a further round of simulations would be conducted to help the first set of pilots to familiarise themselves with the process. Cdr Bristowe further emphasised that operations would start in a cautious, phased approach. He noted that operational limits would only be expanded once the Applicant is satisfied that it is safe to do so. The Harbour Master agreed with Cdr Bristowe's comments with respect to the approach that will be taken with respect to successive simulations and the gradual increase of operational limits.
25.	The ExA asked whether the operational limits would be mandatory for the Masters.	Cdr Paul Bristowe, on behalf of the Applicant, stated that there will always be a mandatory point after which the Master of the vessel must take tugs. It was for the Harbour Master to designate those requirements, relating number of tugs and when they need to be taken. The Master, however, always has discretion to take tugs if desired. The Harbour Master stated that a currently operating example is the Humber Sea Terminal, where there is a mandatory limit of 25 knots following which tugs must be used.
26.	The ExA asked whether it would be appropriate for operating limits to be secured through the DCO.	Mr James Strachan KC, on behalf of the Applicant, stated that this would not be appropriate. There are pre-existing regulatory requirements to ensure navigation and operational safety which are in place on the Humber, and indeed on other waterways. The general approach in this context is

		that it is not appropriate to replicate or interfere with that regulatory process that is already in place.
27.	The ExA asked the Applicant to consider the scope of the NRA as a document that can be relied upon to determine operational controls.	Following the ExA referring to Requirement 15 in the dDCO, which refers to the NRA, Mr James Strachan KC, on behalf of the Applicant, reiterated that it would not be appropriate for the DCO to impose operational limits. The process to be conducted in order to build up operations is based on experience and has precedent in other ports. In policy and law, the Secretary of State should have regard to the regulatory functions of the SHA. The Applicant would assist the ExA by highlighting to them the operational limits contained in the NRA. Mr Strachan KC noted further that this would be explored in more detail in ISH4, as indicated by the ExA.
28.	The ExA asked the Applicant to clarify whether the Harbour Master or Dockmaster is responsible for raising any marine risk assessment that has a significantly high-risk score.	Cdr Paul Bristowe, on behalf of the Applicant, stated that the person who would be raising issues of this nature with the Marine Technical Authority would be whoever is the most appropriate to do so. The question of who is appropriate would vary depending on the situation. For example, a risk relating to pilotage would sit with the Harbour Master, whereas a mooring risk would be the responsibility of the Dockmaster. Cdr Bristowe added that the Harbour Master and Dockmaster are in continuous dialogue. Through this dialogue, they would be able to quickly determine the most appropriate person to escalate any concerns. He emphasised that irrespective of who does this, any concerns will always be escalated appropriately.
29.	The ExA asked about the formal relationship that would exist between the project team, the delivery team and the	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant will provide a thorough written response in relation to this question.

	dockmaster during the construction phase.	**Post hearing submission** The Applicant has provided a response to this at Action 23 below. As indicated in the response to Action 23, a full response to this question has been providing in writing at NS.221 in document **10.2.38 - Applicant's Response to ExQ2 [with Appendices].**
30.	The ExA invited the Applicant to respond to DFDS' request for a previous version of the Marine Safety Plan.	Mr James Strachan KC, on behalf of the Applicant, stated that the Marine Safety Plan is continuously updated, and it would be counterproductive to provide a new version every time a minor amendment occurs. However, the Applicant will provide DFDS with a copy of the 18 May 2023 version.
31.	The ExA turns to the agreement that has been reached between the Applicant and IOT Operators in respect of impact protection measures. The ExA asked the Applicant to read out the letter.	Mr James Strachan KC, on behalf of the Applicant, read the letter [AS-020]). Mr Strachan also displayed indicative drawings of the design. Mr Strachan KC stated that further details of the proposal will be provided later, in conjunction with IOT Operators. Whilst the Applicant retains its position that impact protection measures are not strictly necessary, the purpose of this development is to achieve consensus between the Applicant and IOT Operators. The agreement is without prejudice to either party's case, and its terms are subject to the ExA's acceptance of the proposed changes to the Application.
32.	The ExA asked the Applicant if the indicative design of the impact protection measures is likely to impact any of the assessments that have already been undertaken.	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant is ensuring that the proposed amendments are assessed so as not to cause any additional environmental effects. He added that these changes are being made in parts of the marine environment where some piling was already due to take place. While there may be some differences in the outcomes of assessments, it is not a dramatic change.

		Mr Strachan KC confirmed further that the Applicant will likely need to make some modest adjustments to the order limits. The Harbour Master stated that, based on a preliminary view of the indicative design, the impact protection measures appear to be worthy for further consideration. Cdr Paul Bristowe, of the Applicant, confirmed that the Dock Master and the Harbour Master will collaborate on the design.
33.	The ExA asked the Applicant to provide a more general update on its incoming changes request.	Mr James Strachan KC, on behalf of the Applicant, confirmed that all proposed changes will be submitted as part of one request. This will be submitted in due course.
34.	The ExA asked the Applicant whether it is proposing to carry out further simulations, particularly in relation to berth 3 of the proposed development. The ExA asked in particular whether the findings of these have changed following the shift from the original proposal to have four berths form part of the development.	Mr Mike Parr, on behalf of the Applicant, stated that in the original set of simulations from November and December 2021, 20 runs were carried out of vessels approaching berth 3. It was concluded that the relative position of berth 3 to the Eastern Jetty and other hazards was essentially the same in both the original 4 berth set up as in the new 3 berth set up. The expert opinion of the simulation team in July 2022 was to focus on berth 2, where the flows were more extensive. This decision was made because the simulations of berth 3 in November and December 2021 were satisfactory, and that the change from a 4 berth to 3 berth scheme would not generate changes to the outcome of the navigations that had been undertaken already in relation to berth 3.
35.	The ExA instructed the Applicant and DFDS to engage with respect to	Mr James Strachan KC, on behalf of the Applicant, welcomed this and stated that the Applicant will consider further what additional simulations are necessary, if any.

	differences in relation to the approach taken with the simulations.	**Post Hearing Submission** The Applicant will provide a report at Deadline 6 on any additional simulations taken out, if any.
36.	The ExA invited the Applicant to respond to DFDS' comments regarding the adoption of worst-case parameters in simulations.	Mike Parr, on behalf of the Applicant, clarified that setting limits based upon the outcomes of the simulation would run contrary to the intended purpose of the simulations. The simulations cannot be fully representative of real-world conditions, HRW ensure that any assumptions result in a conservative and appropriate assessment. The simulations are designed to provide indicative limits for the operations within the Port. The operators of the Port then apply their wider knowledge and expertise to develop limits, using the outcome of the simulations as a guide.
37.	The ExA asked the Applicant to clarify further whether the simulations were run at the very extremes of potential real-world scenarios.	James Strachan KC, on behalf of the Applicant, stated that DFDS will have its own precedent approach when simulating for its own operations. The dialogue with DFDS should help the Applicant understand the approach adopted by DFDS in their own simulations. It is hoped that this will assist the Applicant and DFDS to resolve their disagreements with respect to this point.
38.	The ExA asked the Applicant to include DFDS and IOT Operators in ongoing simulation discussions.	Mr James Strachan KC, on behalf of the Applicant, agreed that the Applicant is happy to engage with all parties on this point.
39.	The ExA invited the Applicant to provide more information on the role and the inner working of the Harbour Authority Safety Board (HASB).	James Strachan KC, on behalf of the Applicant, agreed with the ExA's characterisation that the HASB is the general duty holder for all ports within the ABP estate.

		Mr Mike McCartain, on behalf of the Applicant, introduced himself as Group Director for Safety, Engineering and Marine. He is also responsible for the Applicant's dredging company, UK Dredging. He explained that the HASB meets every two months to consider a range of issues. These issues cover both the land and marine context and relate to risks. Mr McCartain emphasised that safety is a core value at ABP rather than a priority. He explained that while priorities change, safety is a core value that is always present. Mr McCartain explained that the Applicant's Chief Executive ensures that all of the Applicant's operations are conducted safely. This shows that the Applicant has strong leadership in safety. Safety sits at the very top of the Applicant's business and runs throughout its structure.
40.	The ExA asked how the role of HASB in relation to development proposals.	Mr Mike McCartain, on behalf of the Applicant, confirmed that HASB is generally very proactive. HASB identifies opportunities for training and general improvement from a safety perspective. In relation to this application, the HASB has reviewed the NRA, and listened to both expert advice and stakeholder input.
41.	The ExA asked if the primary purpose of the HASB is to serve an audit function.	Mr Mike McCartain, on behalf of the Applicant, agreed this is one of the elements of the HASB. It also reviews any near misses and other data/trends so that action can be taken – it is pro-active not reactive. He added that he also engages with the designated person to review the information that is to be presented to HASB in advance of the meeting, to ensure that the information is sufficiently robust.

42.	The ExA asked how the Applicant maintains the independence of the designated person.	Mr Mike McCartain, on behalf of the Applicant, explained that the purpose of the designated person is to ensure that the right assurance is provided to the duty holder and that an audit function is provided. The designated person attends the HASB. In addition, the designated person attends the Audit and Risk committee at least once a year to ensure his role is independent. The Marine code is agnostic as to whether the designated person is an employee, so long as the above requirements are satisfied. Mr McCartain elaborated that the original designated person has since left ABP. Mr McCartain is now acting as the temporary designated person until someone with the requisite experience can fill this role permanently. It is hoped that someone will be appointed in the next few months.
43.	The ExA asked Mr McCartain how he balances his role as designated person with his membership on the HASB.	Mr Mike McCartain, on behalf of the Applicant, stated that an audit and risk committee is responsible for everything to do with harbour safety. The Audit and Risk committee meet 3 times a year and will require the Designated Person to attend at least annually. The committee consists of the Applicant's shareholders, CFO, CEO and Chairman. The Audit and Risk committee meet with the designated person to ensure that they are fulfilling their functions, and also that they are adequately supported. These meetings happen outside of the wider committee meeting and are not minuted. These mechanisms help to preserve their independence. Mr McCartain added that the International Maritime Organisation (IMO) and Maritime & Coastguard Agency (MCA) has carried out a rigorous audit of the Applicant's processes via a recent IIIC Audit from the IMO with respect to the duty holder, and this independent process led to a positive review.

44.	The ExA asked for the details of the next Audit and Risk committee meeting.	Mr Mike McCartain, on behalf of the Applicant, confirmed that this is scheduled for November 2023. He added further that their priority is ensuring that the designated person is sufficiently qualified and experienced, and as such would not be uncomfortable if he remained in this role at the time of this next meeting if an appropriate replacement has not yet been identified.
45.	The ExA asked who within the organisation is responsible for driving forward the IERRT project.	Mike McCartain, on behalf of the Applicant, confirmed that the project is sponsored by the regional director. As Mr McCartain, as the designated person, is not responsible for this, it allows him to take a more impartial look at the project.
46.	The ExA asked if it is normal for the Head of Marine for the Humber to attend the HASB.	Mike McCartain, on behalf of the Applicant, stated that the HASB does invite people to attend from time to time. The purpose of inviting other parties to attend is so that they are able to see how the HASB works, as an example of robust governance as well as having a wider view of company business as part of their personal development.
47.	The ExA asked how other players within the Applicant's organisational structure feed into the HASB.	Mike McCartain, on behalf of the Applicant, stated that the Regional Director Humber and the Head of Marine Humber need to work together efficiently and collaboratively together. The Harbour Master and Dock Master report to the Head of Marine on the Humber. The Head of Marine then communicates and co-ordinates with the Regional Director.

		As the Group Marine Director, Mr McCartain is responsible for policy, assurance, and auditing as well as acting as a subject matter expert (SME) when required. Mr McCartain added further that the Harbour Master and Dock Master are welcome to attend the HASB meetings, but generally the Regional Director will represent their concerns to HASB.
48.	The ExA asked if there is a back-channel relationship with the different masters	Mr Mike McCartain, on behalf of the Applicant, stated that there is. In particular, he emphasised that it is important for different masters to share learnings with one another.
49.	The ExA invited the Applicant to respond to DFDS' comments regarding the HAZID workshop.	Mr Mike McCartain, on behalf of the Applicant, stated that the designated person should not be included in the HAZID workshops. He stated that the designated person needs to remain impartial so that they are able to review any issues that arise further down the process. Mr James Strachan KC, on behalf of the Applicant, noted further that at the 12 December 2022 HASB meeting the designated person was Mr James Cook, not Mr Mike McCartain.
50.	The ExA asked the Applicant for details on the process that would be required for the HASB to review potential changes to the proposed development.	Mr James Strachan KC, on behalf of the Applicant, stated that the NRA which went to the HASB included impact protection measures. At this time, they were an item which could be included at the election of the Harbour Master. The proposed change to the scheme is therefore not entirely new to the HASB. However, the Applicant will ensure that the proposed change is presented to the HASB.

		Mr Mike McCartain, on behalf of the Applicant, confirmed that HASB will be presented with the proposed changes. He added that an extraordinary HASB can be convened if necessary.
Agenda Item 4 – Onshore Transportation		
51.	The ExA asked the Applicant to give an update on any transport concerns that have arisen since Deadline 3.	Mr Simon Tucker, on behalf of the Applicant, confirmed that there have been four meetings between the traffic consultants for the Applicant and the interested parties. These were held on 10 August, 30 August, 15 September, and 28 September 2023 (the morning of ISH3). Mr Tucker confirmed that good progress has been made, and that there is a draft Statement of Common Ground being prepared. Mr Tucker hoped that this would be ready for Deadline 5.
52.	The ExA asked the Applicant to respond to DFDS' submission regarding an error in the transport assessment.	Mr Simon Tucker, on behalf of the Applicant, stated that a revised set of models have been sent to DFDS's traffic consultants, and that the plan is to submit these as part of the Statement of Common Ground.
53.	The ExA asked the Applicant to clarify whether the expectation that the development will generally operate at 80% of the 660,000-unit capacity has any impact on the assessments with respect to transport sensitivity.	Mr Simon Tucker, on behalf of the Applicant, stated the average flows would likely be more than 25% lower than the maximum throughput of 1800 a day. He explained that if the flow is reduced by this, then there would be a proportional impact on the wider network. Mr Tucker confirmed in response to a question from the ExA that he would provide modelling that assessed the outputs that assess the lower throughput. **Post-Hearing Submission**

		The intention is to provide this as part of the emerging Statement of Common Ground.
54.	The ExA asked the Applicant about their predictions for the split between accompanied and unaccompanied freight.	Mr Simon Tucker, on behalf of the Applicant, noted that the split between accompanied and unaccompanied freight has been agreed between the parties and will be outlined in the Statement of Common Ground.
55.	The ExA asked that Applicant about the data included within Appendix 7 of the Transport Assessment.	Mr Simon Tucker, on behalf of the Applicant, acknowledged that there is a printing error in Appendix 7 of the Transport Assessment [AS-008], and this will be addressed in the response to ExQ2. He elaborated that the final three columns in the table are correct, however the preceding columns became misaligned. A revised version would be submitted to the ExA in response to TT2.01. **Post Hearing Submission** The Applicant has provided a revised copy of this data at Appendix 2.
56.	The ExA asked the Applicant to explain whether traffic levels around the Port of Immingham is back to pre-Covid levels.	Mr Simon Tucker, on behalf of the Applicant, confirmed that a review of survey data used showed that the appropriate baseline data for use in the Transport Assessment [AS-008] was post-Covid. All parties have confirmed that they are happy with this baseline.
57.	The ExA asked the Applicant to respond to DFDS's request for A160 validation data.	Mr Simon Tucker, on behalf of the Applicant, confirmed that the Applicant is happy to provide this data. He emphasised that the data set on which the Transport Assessment [AS-008] is based is robust.
58.	The ExA asked the Applicant why they have excluded a number of committed	Mr Simon Tucker, on behalf of the Applicant, explained that there was a wider scoping process undertaken when preparing the Environmental Statement as to which committed developments should be tested. He

	developments from the agreed scope of the Transport Assessment.	added that the schemes which were deemed as necessary for transport assessments are highlighted in Chapter 20 of the Environmental Statement [APP-056]. Alongside this, the Applicant held transport-focused working groups with North East Lincolnshire and North Lincolnshire Councils, as well as National Highways. During these, the Applicant discussed the specific inclusion of different committed developments within the Transport Assessment. This process is evidenced within the Applicant's documentation. DFDS's consultants have noted some other developments that were not part of this scoping process. Mr Tucker noted that the majority of these developments generate very little traffic during peak hours. The developments typically being housing developments. To the extent that several of the developments identified by DFDS do generate larger volumes of traffic, this is only true during the construction phase. These are therefore not analogous to the proposed development. Therefore, the Applicant is confident that the issue of committed development has been appropriately and robustly addressed in the Transport Assessment [AS-008].
59.	The ExA asked the Applicant to provide an update on the latest position regarding expected traffic volumes at the East Gate.	Mr Simon Tucker, on behalf of the Applicant, noted that the Applicant's position has not changed. The Applicant expects that 85% of traffic will use the East Gate, and 15% will use the West Gate. This is because it is easier for vehicles from IERRT to leave using the East Gate. Mr Tucker added that the Applicant will provide signage encouraging vehicles leaving IERRT to turn right. By doing this, the Applicant is able to direct traffic. Given that outbound movements have a greater traffic

		demand during peak hours, this will make a significant impact on the routing of traffic. Mr Tucker stated that for inbound traffic, a booking system will be used which directs customers to a certain route. He noted further that the Applicant is in discussions with the highway authority to change the routing to the dock, but this is not part of the DCO application.
60.	The ExA asked for clarification as to whether behaviour controls are required to achieve the 85:15 split of traffic envisioned in the transport assessment.	Mr Simon Tucker, on behalf of the Applicant, stated that this conclusion was reached by way of a logic-based analysis. The Transport Assessment [AS-008] explains that this is due to both journey time and ease of access. However, the matter of behavioural controls have arisen out of discussions with the interested parties. These will serve to reinforce these conclusions as necessary.
61.	The ExA asked how the behavioural controls will serve to encourage drivers to use certain routes.	Mr Simon Tucker, on behalf of the Applicant, stated that this needs to be understood in the context of a long journey that the driver has undertaken to reach the port. Typically, a truck driver would prefer to stay in cruise control for as long as possible. The route through the Port would not allow them to do this, instead requiring manoeuvring through multiple additional junctions requiring multiple gear changes. Most of these drivers will typically be at the end of a very long shift, and they will want to be on the easiest route. The route via the East Gate provides this.
62.	The ExA asked for more information regarding the implications on traffic at the West Gate.	Mr Simon Tucker, on behalf of the Applicant, referred to REP2-010, which shows a survey of existing queuing at the West Gate. This survey demonstrates that there is, on average, a queue of 4-6 vehicles on the approach to the West Gate.

		The Deadline 2 survey showed that, at the West Gate, traffic peaks between 10:00-11:00am, with a peak of 16 vehicles. The current queues are generally only around 2 to 4 minutes. This is a very manageable figure. Mr Tucker added that the expectation is that inbound traffic that arises from the development will peak between 4:00 – 6:00pm. As such, this will not impact the current peak traffic period at the West Gate. Mr Tucker added that the assessment provided at REP2-010 (Page 19) confirmed that a change in HGV routing via West Gate from 15% to 30% could be readily accommodated.
63.	The ExA asked the Applicant whether local highway authorities have been involved in these discussions.	Mr Simon Tucker, on behalf of the Applicant, stated that the Applicant remains in discussion with the highway authorities. Once an agreement is reached with the interested parties in the statement of common ground, this can be shared with the highway authorities.
Agenda Item 5 – Any effects for the integrity of the Humber Estuary Special Area of Conservation, Special Protection Area and Ramsar site (the designated sites)		
64.	The ExA asked the Applicant to provide an update on any progress being made to address the representations raised by Natural England and the MMO.	Mr James Strachan KC, on behalf of the Applicant, introduced Dr Jamie Oaten, Andy Pearson and Dr Elena San Martin, each of whom addressed the Examination. Their submissions are enclosed at **Appendix 3**.
65.	The ExA asked for clarification as to whether the outstanding issues can be resolved in a reasonable time.	Mr James Strachan KC, on behalf of the Applicant, noted that Natural England and the MMO have not attended any of the Issue Specific Hearings. While it is expected that these issues will be resolved, in the absence of representations from these parties, the Applicant wanted to provide the ExA with an update of the position as it saw it.

		Dr Jamie Oaten, on behalf of the Applicant, confirmed that the Applicant has had meetings with both Natural England and the MMO, following which the Applicant considers that it is likely that all of the outstanding issues will be resolved. Dr Oaten emphasised that these meetings have been constructive, and that the parties are working towards finalising statements of common ground over the next month.
Agenda Item 6 – Any Other Business		
66.	The ExA asked the Applicant to review Chapter 20 of the Environmental Statement, in light of the IGET application.	Mr James Strachan KC, on behalf of the Applicant, confirmed that this would be reviewed.
Hearing closed at 17:33		

3 Table 2: Action Points

Action	Description	Action by	Deadline	Applicant's Comment/where has the action been answered
1	Further to the Accompanied Site Inspection (ASI) held on 26 September 2023, submit a note outlining: • the names and basic dimensions of vessels observed within and adjacent to the Port of Immingham from the port's Marine Control Centre; and • the weather conditions (particularly wind strength and direction), state of tide and current (speed and direction of flow).	Harbour Master Humber	D4	
2	Provide a plan or plans showing: • the existing manoeuvring areas currently used by vessels arriving at or departing from the inner and outer parts of the Port of Immingham; and • how those manoeuvring areas would be adapted to accommodate the Proposed Development.	Harbour Master Humber	D4	
3	Provide a note ("the Killingholme note") containing plans, commentary and an explanation of the following: 1) the differences between operations at the ports of	CLdN	D4	

	Killingholme and Immingham, specifically referencing: • the use of the cassette system; and • the double stacking of containers. 2) the operating model and current land/berth capacity of Killingholme port; 3) how capacity at the port of Killingholme could be expanded in the future; 4) post-Brexit impacts on port capacity and how those conditions have subsequently changed.			
4	Provide written response to the Killingholme note and the potential for Killingholme to serve as an alternative to the Proposed Development.	Applicant	D5	The Applicant will provide a response to this at Deadline 5.
5	Jointly prepare a Statement of Common Ground (SoCG) regarding dwell times clearly setting out the differences in baseline capacity and assumptions between the parties and explain what internal and external factors influence dwell times and the consequence of differences in the assumptions.	Applicant, CLdN, DFDS and Stena Line	D5	The Applicant will provide a response to this at Deadline 5.
6	Provide as an appendix to ISH3 post hearing submissions the full	CLdN	D4	

	judgments for the cases referred to by CLdN and the Applicant during agenda item 2 discussion regarding the case law and policy considerations for need and alternatives. CLdN and Applicant to agree on the judgements to be included in that appendix to avoid duplication of submissions.			
7	Submit a copy of the Ellesmere Port High Court decision referred to during ISH3, highlighting the most relevant sections for the Examining Authority (ExA) to consider, including highlighting the diametrical opposition between the two Town and Country Planning Act 1990 Section 78 appeal decisions at issue in that case.	IOT Operators	D4	
8	Provide a written response to CLdN's and IOT's submissions on case law and policy regarding need and alternatives.	Applicant	D5	The Applicant will provide a response to this at Deadline 5.
9	Provide references for the relevant Energy Policy considerations that should be taken into account, to include relevant provisions and explanatory statement on fuel resilience from part 12 (once part 10) of the energy bill currently passing through parliament.	IOT Operators	D4	

10	Provide a note on the landlord and tenant relationship (tenancies, licences etc) between the Applicant and IOT Operators and how this interacts with the proposed Protective Provisions, confirming the responsibility for undertaking maintenance and repairs for the Finger Pier and trunkway	Applicant and IOT Operators	D5	The Applicant will provide a response to this at Deadline 5.
11	Submit a note and plans concerning the comparable Ro-Ro berths and petrochemical berth siting relationship examples referred to by Mr Hannon at ISH3, commenting on relevant manoeuvres and distances.	Applicant	D4	The Applicant has provided this at Appendix 1.
12	Provide information on the distances between the petrochemical jetty at Thurrock and the CLdN Ro-Ro facility at Purfleet.	CLdN	D4	
13	Submit indicative scaled drawings for the proposed impact protection measures and alterations to the IOT Finger Pier ('the alternative measures') which are the subject of negotiations between the Applicant and IOT Operators outlined in the Applicant's letter of 28 September 2023.	Applicant	D4	Please see the plan in AS-021. Following ISH3, the Applicant and the IOT Operators have been continuing to progress discussions in respect of the provision of suitable impact protection measures. At this stage, any plans shared between the parties as part of those negotiations have been shared on a without prejudice basis. The Applicant will address any issues arising at Deadline 5.

14	Provide an update with respect to the negotiations relating to 'the alternative measures'.	Applicant and IOT Operators	D4	The Applicant and IOT Operators are continuing to engage with one another. A series of without prejudice meetings have been held following the conclusion of Issue Specific Hearing 3.
15	Submit assessment of the likely environmental effects and marine safety implications of the alternative measures, having regard to the provisions of the Environmental Impact Assessment Regulations and the Habitat Regulations.	Applicant	D5, if not already submitted as part of any request for change to the originally submitted application	The Applicant will provide a response to this at Deadline 5.
16	Clarify the Navigational Risk Assessment [APP-089] conclusions with regard to the hazards related to the operation of the Eastern Jetty and submit details of the navigation simulations undertaken for the pre-application four-berth scheme.	Applicant	D4	Within the NRA [APP-089], Appendix C, Table C9, considers a Hazard Scenario of an Allision occurring due to a Ro-Ro arriving/departing the IERRT berth 2 or 3 with a tanker on the Eastern Jetty. In considering this risk, the attendees at the third HAZID Workshop identified that the potential causes are; adverse weather conditions, incorrect assessment of tidal flow, navigation equipment failure, excessive vessel speed, inadequate number/type tugs, manoeuvre misjudged, high traffic density, communication failure – personnel, vessel breakdown or malfunction, limited area for manoeuvring, failure of berth mooring systems, and human error/fatigue.

				The attendees at the third HAZID workshop then identified that the following controls are already in place to mitigate these known (and now espoused) causes; monitoring of weather conditions, passage planning, towage guidelines, available and appropriate towage, harbour authority requirements (e.g. PEC requirements), VTS, port facility emergency plans and oil spill contingency plans. In consideration of these causes and embedded controls, the attendees at the third HAZID Workshop came to relative consensus that the most likely and reasonable worst case scenarios were: • Most likely: an approaching Ro-Ro loses control and makes slow contact with a berthed tanker and damage to infrastructure such as the cargo pipes; and • Worst credible: Ro-Ro makes contact with a berthed tanker resulting in a significant allision that punctures the tanker's double hull. The most likely scenario was considered (on average by the attending SME's) to have a 'possible' frequency/likelihood of occurring as mitigating controls currently stood. Whereas the perception was that the worst credible

				scenario was ‘unlikely’ with the controls currently in force at the port. The consequences for the worst credible risk were considered to be ‘extreme’ across the four receptors. However, the most likely consequence descriptors at the embedded stage were considered to be from ‘moderate’ to ‘extreme'. In order to seek an ALARP state for this risk, like every other, the stakeholders and SME’s at the HAZID workshop then considered what other controls could be applicable to best help mitigate this risk further. The identified controls here were considered to be; berthing criteria, charting a safety area for berthing procedures, and conducting additional pilotage training and familiarisation (i.e. more than would usually take place). It was considered by the attendees at the HAZID workshop that these three further applicable controls were preventative measures and thus would only mitigate frequency of the risk occurring. The attendees at the HAZID workshop then again agreed that the Potential Worst Credible frequency would theoretically reduce to ‘rare’, and the Potential Most Likely frequency would reduce to ‘unlikely’, if the Applicant adopted these further applicable controls.

				These further applicable controls, amongst all others, were presented to representatives of the SHA (including the ABP Head of Marine, Humber Harbour Master, and Immingham Dock Master) amongst others, in a feasibility level discussion on cost-benefit on 6th October. With respect to this risk the SHA advised that they would take forward all of the identified further applicable controls (i.e. they became (to be) Applied Controls). Therefore, the SHA's conclusion of 'the hazards related to the operation of the Eastern Jetty' is that; both the worst credible and most likely scenarios have been mitigated to an ALARP state whilst also being within the tolerability threshold as set by the HAS Board. The navigation simulations conducted as a feasibility assessment for the 4-berth scheme (which also had a significantly different orientation) have no bearing on this DCO application, the Navigational Risk Assessment or the final design to be considered. These simulations were undertaken as part of a feasibility study, and informed the Applicant that a berth orientated Northwest to Southeast (~330°) was not operationally feasible due to the direction of the tidal stream making the berth more challenging than it needed to be and provided additional challenges.

17	Applicant to engage with DFDS and CLdN and IOT Operators to agree parameters for the undertaking of additional simulations to address DFDS' concerns with respect to the Proposed Development's proximity to the Eastern Jetty, including the effects of current direction on the approach to the proposed berths 2 and 3. Applicant to submit not later than D5 a detailed brief and timetable for undertaking any additional simulations, further to discussions to be held with DFDS and CLdN and IOT Operators (see footnote*).	Applicant and DFDS, with the assistance of CLdN and IOT Operators	D5	The Applicant will provide a response to this at Deadline 5.
18	Submit no later than D6 a report on any additional simulations.	Applicant	D6	The Applicant will provide a response to this at Deadline 6.
19	Identify the currently anticipated operating limits (parameters) for the Proposed Development.	Harbour Master Humber and Dock Master Immingham	D4	The Dock Master Immingham has liaised with the Harbour Master Humber and a response will be provided to this Action Point by the Harbour Master Humber.
20	Provide an update clarifying the anticipated controls to be applied to the Proposed Development to reduce all navigational risks to "As Low As Reasonably Practicable", with particular regard to the operation of the IOT.	Applicant and Harbour Master Humber	D5	The Applicant will provide a response to this at Deadline 5.
21	Provide a note clarifying responsibilities and reporting line under paragraph 2.2.5 of the Port of	Applicant	D4	The Port of Immingham, in common with all other ABP Ports and Harbours, conducts Navigational Risk Assessments of its port and

	Immingham Marine Safety Management System (MSMS) [REP3-017] with regard to identifying, reviewing and implementing additional risk control measures to mitigate marine risks identified by the relevant Statutory Harbour Master as being "intolerable, and/or (with) a significantly high risk score".			marine operations. The responsibility for conducting these operational risk assessments sits with the Dock Master for the respective facility, in this case the Dock Master for Immingham, Capt. Mark Collier. Under Section 2.2.5 of 'The Port of Immingham - Port Marine Operational Procedures Manual - Overview of the ABP Marine Safety Management System' [REP3-017], any risk assessment outcome that is intolerable and/or has a significantly high-risk score, will be raised through the line management structure. The line manager for marine operations on the Humber, is the Head of Marine (HOM), Cdr Paul Bristowe. The HOM would collate any intolerable and/or a high-risk score assessments and include these at regional review meetings with the Regional Director; the regional leadership team, led by the Regional Director will consider available risk control measures and discuss potential additional controls. In parallel, the Technical Authority Marine (TAM) reviews risk assessments across the whole ABP Group and advises on further risk controls that may be applicable. As described in the Section 2.2.5 [REP3-017], if the TAM believes the operation and/or risk should be notified to the Duty Holder (Harbour Authority

				and Safety Board) it will be included in the bi-monthly Board
22	Submit a copy of the 18 May 2023 version of the Port of Immingham MSMS.	Applicant	D4	The Applicant wishes to clarify that it submitted a copy of the *The Port of Immingham - Port Marine Operational Procedures Manual - Overview of the ABP Marine Safety Management System* at Deadline 3. This document is a live and dynamic document, and the current version is amended as part of the dynamic nature of a MSMS and guidance document. A full list of all updated sections and a commentary of the changes is provided at the start of document which provides clarity on the nature of the updates made from the May 2023 version. Therefore, the Applicant does not consider it would be of meaningful assistance to the examination to provide an out of date version of a document that is intended to be continually updated.
23	Provide a note or addendum to the draft CEMP explaining the formal relationship between project construction delivery team and Dock Master during construction phase, specifically having regard to safety considerations of any overlapping construction and operational activity.	Applicant	D4	The Applicant has provided a response to ExQ2 NS.2.21 which explains the important requirement for liaison between the works contractor, Dock Master, VTS and Pilotage (CHA), to ensure that the works are coordinated and carried out safely, with clear lines of communication established.

				The marine liaison plan will cover typical construction operations as well as protocols for abnormal or emergency liaison with the Dock Master, VTS and Pilotage (CHA) functions during the construction phase.
24	Review appropriateness of the Construction Environmental Management Plan [REP2-004] for securing marine risk controls and clarifying the responsibilities for the Harbour Master Humber and Dock Master in Table 3.4 of the CEMP; or submit an additional document that can be certified under the dDCO.	Applicant	D5	The Applicant will provide a response to this at Deadline 5.
25	Outline the Harbour Works Consent process and how it would relate to the works subject to the dDCO, including those works subject to the Deemed Marine Licence.	Applicant	D4	The position regarding Harbour Works Consent is being discussed with the Harbour Master and updates will be provided at Deadline 5. In brief, however, the Harbour Works Consent (HWC) process applies to the carrying out of works below mean High Water Springs, which requires the prior written approval for the purpose of Section 9 of the Humber Conservancy Act, 1899 as amended by Section 6 of the Humber Conservancy Act 1905. The consent is given by the Harbour Master, Humber, however, this does not cover works in the River Humber beyond or riverward of

				the River Lines as defined in Section 13 of the Humber Conservancy Act, 1905. A Harbour Works Consent Application Form is provided on the Humber Estuary Services website and applications must be accompanied by, plans detailing the proposed works and a copy of the Marine Licence for the works. Any approval granted by the Harbour Master, Humber, will be subject to conditions to protect ABP's conservancy and navigation interests and, if considered necessary, will include requirements such as arranging Local Notices to Mariners and marking/lighting the works, and submitting pre- and post-works information. In general terms, Harbour Works Consent is required in addition to other consents (such as landowner approval, planning permission or assent from Natural England) and it is the responsibility of the HWC Applicant to satisfy themselves and provide confirmation that this has been secured alongside the application for HWC.
26	Provide minutes of the 12 December 2022 Harbour Authority and Safety Board (HASB) meeting and consider	Applicant	D4	The Applicant has provided the minutes of the 12 December 2022 HASB meeting at **Appendix 4**.The presentation documents that

	whether minutes, notes and reports relevant to the Proposed Development arising from discussions prior to that HASB meeting exist and can be submitted into the Examination, redacted as necessary.			were provided to the HASB prior to the meting are provided at Appendix 5.
27	Provide minutes of HASB meeting to consider any proposed changes to the Application before the close of Examination.	Applicant	Not later than 25 January 2024	The Applicant will provide a response to this no later than 25 January 2024.
28	Issue corrected version of the table forming Appendix 7 which formed part of REP1-009	Applicant	D4	Please see the answer to question TT2.01 in the Applicant's response to ExQ2.
29	Consider the data that has been utilised for validation of the traffic flows for the A160.	Applicant	D4	This issue relates to an outstanding matter raised by DFDS in REP3-022 Para 34. It suggests that data captured by DFDS in 2022 shows traffic volumes on the A160 being 20% higher than in the Applicant's assessment. This is addressed in a short technical note attached at **Appendix 6**. The assessment demonstrates that comparison of both DFDS data and permanent count data on the A160 held by National Highways, shows the flows adopted in the modelling assessments for the Transport Assessment (i.e. the 2021 data) is higher than or comparable to the other data sets and is therefore robust in terms of assessing the development.
30	Provide a joint note or SoCG between interested parties, potentially including local highway authorities as	Applicant, CLdN and DFDS	D5	The Applicant will provide a response to this at Deadline 5.

	necessary. The note should address, amongst other things: • for the West Gate, at what level of additional traffic would this gate reach its operational capacity and stop functioning properly; • the split between the handling of accompanied and unaccompanied units and the implications for vehicle generation; • forward transport forecast implications; • the predicted effect for the operation of the Proposed Development on the operation of the A160; and • wider highway issues as necessary.			
31	Submit hardcopies of documents which exceed 50 pages	All parties	All deadlines	All documents submitted at Deadline 4 which exceed 50 pages will be submitted in hardcopy in due course.
32	Undertake a review of the cumulative and in-combination effects assessed in Chapter 20 of the Environmental Statement [APP-056] to take account of the submission of the Immingham Green Energy Terminal (IGET) application.	Applicant	D5	The Applicant will provide a response to this at Deadline 5.

4 Glossary

Abbreviation/ Acronym	Definition
ABP	Associated British Ports
ALARP	As Low As Reasonably Practicable
APT	Associated Petroleum Terminals
CLdN	CLdN Ports (Killingholme) Limited
dDCO	Draft Development Consent Order
DFDS	DFDS Seaways Plc
ExA	Examining Authority
HASB	Harbour Authority Safety Board
HES	Humber Estuary Services
HOM	Head of Marine
HOTT	Humber Oil Terminal Trustees Limited
IMO	International Maritime Organisation
IOT	Immingham Oil Terminal
IP	Interested Party
ISH3	Issue Specific Hearing Three
MSMS	Marine Safety Management System
MCA	Maritime & Coastguard Agency
NPSfP	National Policy Statement for Ports
NRA	Navigational Risk Assessment
PEC	Pilotage Exemption Certificate
SHA	Statutory Harbour Authority
SME	Subject Matter Expert
TAM	Technical Authority Marine
TA	Transport Assessment

Appendix 1 – Examples of Port Layouts in the United Kingdom where Ro-Ro berths and fuel import/export berths have comparable siting relationships.

51

Give examples of any port layouts in the United Kingdom where Ro-Ro berths and fuel import/export berths have comparable siting relationships with what is being proposed for the Port of Immingham.

1. No two ports or their operations are the same and so one would not expect to find direct equivalents with the same arrangements and topographical features. There are several examples of ports, however, where Ro-Ro ships manoeuvre in close proximity to fuel berths or other critical infrastructure.
2. In such cases, the proximity of the port to critical infrastructure (including oil/fuel transfer and storage facilities) means that the safe manoeuvring of vessels requires specific knowledge and expertise safely to berth the vessel. These manoeuvres occur regularly, and they do so without impacting the operations of the nearby facilities.
3. The examples given below are Purfleet, Milford Haven, and Portsmouth.
4. All vessel operations in these ports are well controlled within a tidal environment and are managed in a well-practiced and safe way. These facilities operate large vessels, moving close to important infrastructure and assets of a critically important nature for the UK.
5. The relevant Statutory Harbour Authorities maintain safety and manage this risk through Risk Assessment, using controls, procedures, and guidance to reduce the risk to ALARP.
6. All of these operations are different in terms of tidal flow, manoeuvring room, berthing manoeuvres and essential infrastructure. All, however, are managed similarly in terms of achieving a tolerable level of risk.

Figure 1 – Purfleet Ro-Ro and Oil Terminals

7. **Purfleet Ro-Ro Terminal** (as shown on **Figure 1**) on the North bank of the River Thames is located between Purfleet Oil Storage (COMAH) to the West and another smaller Oil Storage facility to the East. Both oil facilities have associated marine assets in the form of jetties and pipe discharge/delivery trunk ways. The bow of a Ro-Ro vessel using the Western linkspan of the Purfleet Ro-Ro berth is approx. 100m away from the eastern end of the Purfleet Oil Terminal jetty (when there is no ship on the jetty). The distance would be less if a tanker is berthed on the jetty.
8. On an ebb tide the Ro-Ro would have to manoeuvre adjacent to the berthed tanker/or jetty and then stern board onto the linkspan in the flow of the ebb. On a flood tide the Ro-Ro would undertake a similar manoeuvre but with the added complexity of the tide pushing the Ro-Ro towards the Oil Jetty/berthed tanker.
9. Leaving the Western linkspan (Ro-Ro) berth requires the Ro-Ro vessel to turn. This could be done on both an ebb or flood tide, or over slack water. This is undertaken daily on a fixed schedule and without incident – tug assistance is available as conditions require, and also under Port of London towage requirements. The normal berthing operations do not require tugs.
10. The Purfleet Eastern Ro-Ro linkspan with berth Ro-Ro vessel positions the bow of the berthed ship at a proximity of 70 metres to the jetty of the Oil Storage Site Jetty located to the East of Purfleet Ro-Ro Terminal. Both of these oil facilities have vessels berthing, transiting and manoeuvring in close proximity in all tidal states, none of these jetties or associated trunk ways have impact protection.
11. The berthing manoeuvre for vessels using both Ro-Ro berths would be similar and undertaken in all tidal states.
12. The Purfleet Ro-Ro and Oil Storage marine facilities are also located within 600m of the Dartford River Crossing and 900m of the Navigator Oil Terminal (Grays). The tidal flow in this area can reach 8 knots, dependant on tidal conditions.

Figure 2: Port of Milford Haven –COMAH berths and Ro-Pax vessel route

13. **Figure 2** shows the Port of Milford Haven**.** Although the Ro-Pax Vessel 'Oscar Wilde' berths at Pembroke Dock, it transits in relatively close proximity to multiple COMAH berths. It also transits berthed discharging tankers on a regular ferry service that runs from Pembroke Dock to Rosslare (Ireland). The vessel carries a mix of public passengers, cars, accompanied and unaccompanied freight.
14. It should be noted that the Ro-Pax Ferry passes the berth in all states of tidal and weather conditions. In this example the SHA controls the operation using VTS and has procedures in place to ensure that the marine operations are kept within ALARP.

Figure 3: Portsmouth International Port – Ro-Pax Route Passing Oil Fuel Jetty, Ammunition Facility and MOD Assets

15. **Figure 3** shows the route of one of the many Ro-Pax Vessels using Portsmouth International Port (PIP) located within the Dockyard Port of Portsmouth. The Ro-Pax Vessel used to show the AIS track is the Mont Saint Michael, a large ferry on regular passage to St Malo (France) and PIP.
16. Ferry Services to and from PIP happen in all weathers, tidal conditions and times of day. Domestic Ro-Pax operations and high-speed ferry operations are also regularly undertaken to and from various terminals within Portsmouth harbour. Alongside the multiple Naval movements, this makes Portsmouth Harbour's entrance the busiest body of water within any UK port. The movements are managed safely by using VTS, and other procedures and controls, which include stand-by tugs in certain weather conditions.
17. It will be noted that the ferry passes an MoD/Oil Pipeline Agency (OPA) Oil Fuel Terminal, both Aircraft Carriers (of strategic importance to UK defence) and an

ammunitioning facility. Of relevance, is the fact that the ammunition facility (UHAF) does not restrict ferry operations to and from PIP.

Appendix 2 – Summary of Unaccompanied/Accompanied Traffic Sensitivity Test

Summary of Unaccompanied/ Accompanied Traffic Sensitivity Test

	TA Table 8			Sensitivity			Change		
	In	Out	Total	In	Out	Total	In	Out	Total
00:00-01:00	2	1	3	2	1	3	0	0	0
01:00-02:00	2	1	3	1	1	2	-1	0	-1
02:00-03:00	1	1	2	1	1	2	0	0	0
03:00-04:00	1	1	2	1	1	2	0	0	0
04:00-05:00	1	3	4	1	2	3	0	0	0
05:00-06:00	3	9	12	3	8	11	0	-1	-1
06:00-07:00	12	22	34	10	20	30	-2	-2	-4
07:00-08:00	19	31	50	17	29	46	-2	-2	-4
08:00-09:00	26	25	51	23	23	46	-3	-2	-5
09:00-10:00	31	221	252	27	262	289	-4	41	37
10:00-11:00	36	89	125	32	98	130	-4	8	4
11:00-12:00	41	73	114	37	69	106	-4	-4	-8
12:00-13:00	44	74	118	40	68	108	-4	-6	-10
13:00-14:00	50	79	129	45	72	117	-5	-7	-12
14:00-15:00	63	70	133	59	63	122	-4	-6	-10
15:00-16:00	90	63	153	87	57	144	-3	-6	-9
16:00-17:00	107	62	169	104	56	160	-3	-6	-9
17:00-18:00	121	52	173	122	47	169	1	-5	-4
18:00-19:00	145	41	186	152	37	189	7	-4	3
19:00-20:00	128	29	157	144	26	170	16	-3	13
20:00-21:00	38	16	54	42	15	57	4	-2	2
21:00-22:00	6	6	12	6	5	11	0	-1	-1
22:00-23:00	3	2	5	3	2	5	0	0	0
23:00-24:00	2	1	3	2	1	3	0	0	0

*numbers subject to minor rounding error (+/- one vehicle)

Appendix 3 – Script Read by Ecology Experts

ISH3 – ECOLOGY – SAC/SPA/RAMSAR

5. Any effects for the integrity of the Humber Estuary Special Area of Conservation, Special Protection Area and Ramsar site (the designated sites)

JAMIE

Introduction

[Jamie Oaten for ABP]

Before I update you on our latest discussions with Natural England and the MMO, I will first briefly introduce myself and explain my background…

My name is Dr Jamie Oaten. I am a Senior Marine Environmental Consultant at ABPmer. I specialise in EIA and water and sediment quality and I have undertaken numerous EIAs and Water Framework Directive (WFD) assessments for a range of marine sectors including port development, coastal protection, and marine renewables and I have provided technical advice to UK regulators. During my PhD, I researched marine pollution in estuarine environments and the use of marine invertebrates to monitor metal contamination and have several peer-reviewed publications in the subject area.

ABPmer as the Applicant's technical expert consultants have extensively consulted with Natural England and the Marine Management Organisation (MMO), including Cefas, the MMO's technical advisors, in relation to the Proposed Development's effects on the Humber Estuary European Marine Site.

Following receipt of Natural England's and the MMO's relevant representations in April a number of meetings have taken place to discuss those representations (including the arrangement of a Natural England site visit to the Port).

Many of the questions raised relate to information which is available within the assessment material, so a series of 'signposting documents' have been produced for each organisation to assist in their identification of the relevant information or assessment work in the application or to provide further clarification for them. That has already been a very productive process (as illustrated, for example, by the ever shortening list of outstanding comments in both Natural England's and the MMO's most recent Examination submissions) and therefore the vast majority of the comments raised in both Natural England's and the MMO's relevant representations have already been resolved.

The Applicant has also committed to providing an updated Habitats Regulations Assessment (HRA) report by Deadline 5 to reflect this process and to address points that have been raised and we are working with Natural England to ensure that the updated report satisfies their requirements ahead of Deadline 5.

In relation to the few remaining issues arising in the Written Representations from the MMO at Deadline 1 and from Natural England submitted at Deadline 2, further meetings were held with both Natural England and the MMO last week (w/c 18 September 2023) and clarifications on the points discussed in those meetings will be provided to each party in writing.

[I will hand over to my specialist colleagues who can explain how those matters have been addressed by the Applicant. First, Mr Andrew Pearson dealing with coastal waterbirds]

ANDY

Andy Pearson for ABP.

Just to give you some background on myself. I am a marine ecologist and ornithologist with considerable experience in coastal and estuarine environments.

I have undertaken hundreds of coastal ornithology surveys and waterbird disturbance monitoring studies in port and harbour areas throughout the UK and I have an in-depth understanding of any potential effects associated with port development in such environments which has been applied to numerous EIAs and HRAs.

As already stated, the vast majority of comments made by Natural England have already been fully resolved and there were only 3 key discussion points that had been left over with respect to waterbirds that were the subject of the last meeting. These are;

- 1. The use of 300 metres rather than 200 metres as a disturbance buffer for SPA waterbirds;
- 2. The potential effectiveness of proposed construction mitigation for waterbirds; and
- 3. Impact of loss of functional habitat for SPA waterbirds due to the presence of infrastructure.

I am satisfied that these issues have been fully addressed as follows

On the use of 300 metres rather than 200 metres as a disturbance buffer for SPA waterbirds

- In fact, the HRA assessment has applied the use of a 300 m disturbance zone as advised by Natural England.

- Indeed Stage 1 of the HRA screened in for assessment SPA waterbirds for potential likely significant effects using numbers for the entire Port of Immingham foreshore count area, referred to as Sector B in the ornithology surveys.

- This area covers a wider area than the 300 m zone referred to by Natural England, so is even more precautionary based. This wider area was considered appropriate based on bird distribution and considering potential piling noise levels from construction assuming no mitigation.

- However, having started with this highly precautionary approach the zone has been subsequently refined to 200 m specifically for the Port of Immingham area at Stage 2 of the HRA in light of specific evidence demonstrating responses of waterbirds to disturbance stimuli is in fact limited at any distances over 200 m.

- This is particularly in areas subject to already high levels of existing human activity and existing Port operations as is the case around Immingham as you will have seen.

- Accordingly, the precautionary approach described above and subsequent assessment is in line with the advice given by Natural England in its PAD and Written Representation.

The second area of discussion was in relation to the potential effectiveness of the proposed construction mitigation for waterbirds

- Again, the proposed mitigation measures have been developed based on advice received from Natural England on noise levels, namely that construction above below 70 Decibels or above background levels should be avoided.

- The mitigation approach has also been developed based on a robust and detailed assessment of the empirical evidence on bird disturbance, as presented in Chapter 9 of the ES and the Habitats Regulations Assessment report.

- Measures are therefore focused on restricting activity during the winter months when the largest numbers of SPA species are recorded and when birds are considered most vulnerable to the effects of disturbance.

- The proposed measures include a winter marine construction restriction from 1 October to 31 March within a 200 m zone, the use of noise suppression system during percussive piling, acoustic barriers/screening on barges, a cold weather construction restriction and soft starts during percussive piling.

- I am satisfied based on all of the evidence that such proposed mitigation measures are precautionary and effective at minimising waterbirds in this area from exposure to close range visual stimuli and loud noise above 70 Decibels and typical port background noise levels, with only very limited responses anticipated that would not have any material effects on SPA qualifying species

- Indeed, I am completely satisfied that any residual effects would not cause an adverse effect on site integrity in the context of the distribution and population conservation objectives.

The third and final point of discussion has been about considering the impact of loss of functional habitat for SPA waterbirds due to the presence of infrastructure

- Again, a thorough approach has been adopted. The assessment of potential effects has analysed bird data for the Port of Immingham foreshore area. These surveys have been ongoing for over 20 years.

- This includes the deialed analysis of bird distribution mapping data of key SPA qualifying bird species around existing infrastructure in the Port of Immingham area. In addition, detailed discussions with the ornithologists undertaking these surveys have been undertaken for a full understanding of distribution and behaviour of birds in the area which confirms there would be no adverse impact.

- This detailed analysis of bird distribution data for the Immingham frontage has been provided to Natural England to confirm this point and it will be referenced in the updated HRA.

- In summary, this analysis demonstrates that birds use areas of mudflat enclosed by port infrastructure in similar densities to open areas of mudflat.

- It is, therefore, considered that any loss of functional habitat for SPA waterbirds as a result of the infrastructure for the IERRT project will be negligible and we are entirely satisfied that it will not cause an adverse effect on integrity.

I will now hand over to my colleague Dr Elena San Martin who has lead on underwater noise with respect to fish and marine mammals]

ELENA

Dr Elena San Martin for ABP

I am a Principal Marine Environmental Consultant at ABPmer with many years' technical experience of undertaking underwater noise assessments involving acoustic modelling for a range of marine development projects. I have advised on and peer reviewed a number of underwater noise assessments on behalf of UK regulators, including being the lead underwater noise advisor to the Marine Management Organisation (MMO) for the Hinkley Point C and Sizewell C nuclear power station developments. I have also co-authored international guidance and position papers on the effects of underwater sound on marine fauna in relation to dredging.

I can confirm that the Applicant and ABPmer had a very recent positive and constructive further meeting with the MMO and their advisors, Cefas.

The only two outstanding questions from the MMO in relation to underwater noise which we addressed at the meeting are:

1. The justification for the proposed migratory fish restrictions in June and between August and October; and
2. A question as to whether restrictions should apply to vibro piling as well as percussive piling.

1. Proposed restrictions

In terms of the justification for the proposed restrictions, the MMO first advised the Applicant during the pre-application stage of the project to consider the Able Marine Energy Park's (AMEP's) multiple seasonal piling restrictions as the potential basis for the development of targeted mitigation measures for the Immingham Eastern Ro-Ro Terminal (IERRT) Project.

In simple terms, these measures limit the number of hours of piling per 4-week period during June and between August and October.

The Able Marine Energy Park was consented with these measures in place. Although it has not yet been constructed, those restrictions still apply and are clearly considered to be appropriate mitigation for the Humber Estuary.

In accordance with advice from the MMO, to develop measures specific to IERRT, the AMEP restrictions were taken into account and then considered in light of the differences between both projects in terms of:

1. The specific nature and scale of works;
2. The size and number of piles; and
3. The outcomes of the underwater noise modelling.

In terms of the nature and scale of the works, IERRT involves less than half the overall duration of piling that is required for the AMEP development. [*24-37 weeks for IERRT versus a minimum 2 year construction programme or 104 weeks for AMEP*].

IERRT will also involve far fewer, as well as smaller-sized piles, that involve a lower hammer energy to install and therefore lower level of noise. [*214 steel tubular piles for IERRT versus approximately 370 steel tubular piles plus additional sheet piles and anchor piles for AMEP*. *1.422 m diameter piles for IERRT versus 2.54 m diameter piles for AMEP*]

In terms of the outcome of underwater noise modelling that was undertaken for both projects, the percussive piling for AMEP would result in a potential noise barrier effect when the piling is taking place for migratory fish across the entire width of the estuary whereas the percussive piling that is required for IERRT is only predicted to result in a partial barrier when taking place.

IERRT is also situated in a slightly wider, outer part of the estuary compared to AMEP and is surrounded by existing marine infrastructure that is likely to limit to some extent the propagation of noise into the central part of the estuary.

More fundamentally, any notional partial barrier to movements and disturbance effects as a result of the piling for IERRT would necessarily be temporary and very intermittent. It will not take place continuously as there will be periods of downtime, pile positioning and set up. Indeed, as demonstrated to the MMO, actual piling activity is only estimated to take place less than 14% of the time during the piling programme itself (involving up to 180 minutes of percussive piling and 20 minutes of vibro piling each working day). **The movements of all migratory fish will therefore be unconstrained for the vast majority of time during construction**.

It is also worth noting that the underwater noise assessment is based on a worst case assumption which assumes that the percussive piling would be undertaken at full power for up to 45 minutes each pile (and up to 180 minutes for four piles per day). In actual fact, each pile will involve at least 20 minutes of initial soft start when the piling power will be gradually increased, incrementally, until full operational power is achieved within that 45 minute period, rather than full power for 45 minutes. The use of soft start also forms part of the suite of mitigation measures for the project. **The assessment outputs are therefore considered to be very precautionary indeed**.

In summary, therefore, as has been demonstrated to the MMO, **the proposed mitigation is very robust already and it would be unreasonable to impose more restrictive measures because the measures proposed are proportionate but also based on a very robust worst case assessment. As explained to the MMO, the proposed restrictions are therefore considered appropriate and will ensure no significant adverse effect on migratory fish.**

2. **Vibro piling**

The only other point of discussion with the MMO, and also Natural England in relation to lamprey, relates to whether the proposed restrictions should apply to vibro piling as well as percussive piling.

I am entirely satisfied that such a restriction is not necessary. Vibro piling activity will be very short term and intermittent, only taking place up to 5 minutes per pile and 20 minutes each day for four piles.

This equates to vibro piling taking place just 1 % of each day over the period of piling during construction. Furthermore, vibro piling in principle even on a worst case basis would only result in a potential noise barrier across less than half the width of the estuary, leaving the majority of the estuary entirely unconstrained for fish to continue to migrate. So **in terms of its limited physical effect and the fact that it would only occur for approximately 1% of each day, it is clear that any potential barrier effects to migratory fish would be inconsequential and not significant. Needless to say, it is considered neither proportionate nor appropriate for the restrictions to be applied to vibro piling**.

Furthermore, in all my years of undertaking underwater noise assessments in migratory fish estuaries, I have never come across a project specifically requiring restrictions for vibro piling. In fact, there is another project involving piling at New Holland Dock upstream of IERRT that was consented by the MMO earlier this month and which has been conditioned to prioritise the use of vibro piling as much as possible over percussive piling. Vibro piling is also not included in the piling restrictions that have been accepted for the AMEP development.

We have therefore fully answered this remaining issue in our latest discussions with the MMO and I am completely satisfied that there is no basis for any remaining concerns.

In addition to the points that I have already covered, Natural England had previously raised a couple of questions on the presentation of the assessment in terms of effects of underwater noise on grey seal (an interest feature of the Humber Estuary SAC and Ramsar site). Further clarification has been provided on the assessment and will be addressed in the updated HRA report so that, as they have advised, the potential types of effects on marine mammals are considered separately rather than under one impact pathway heading.

A detailed assessment of the absence of disturbance and barrier effects to grey seal is already included in the ES and within the HRA, and the conclusion remains that there is no potential for an AEOI on this interest features of the Humber Estuary SAC. As with migratory fish, any barrier to the movements of grey seal caused by piling noise would be temporary and intermittent. There will be very significant periods during a 24-hour period when no piling will be undertaken and which will allow marine mammals to move freely through the Humber Estuary. Furthermore, grey seals undertake wide ranging seasonal movements over several thousand kilometres and are likely to be able to exploit a much wider area for foraging during any piling activity. Therefore, with the application of the proposed mitigation measures for the IERRT Project, together with any measures that are applied to other projects involving underwater noise effects in the area, the risk of exposure will be limited and will avoid a potential adverse effect on the integrity of the grey seal interest feature.

[I would now like to hand you back to my colleague Dr Jamie Oaten in respect of the water and sediment quality assessment to provide an update on matters relating to contaminants]

JAMIE

Water and sediment quality

The only other question that that has been posed by the MMO relates to the suitability of dredged material for disposal at sea. In their Written Representation, the MMO confirm that they consider that the dredge material is suitable for disposal at sea in relation to trace metals, organotins, polycyclic aromatic hydrocarbons, and polychlorinated biphenyls, but they note that in sample site 9 there are slightly elevated concentrations of brominated flame retardants, known as polybrominated diphenyl ethers (or PBDEs). However, the MMO correctly highlights itself that there are no current agreed concentration levels or thresholds in England that require

action with regard to these contaminants and therefore the comments from the MMO are described as advisory only (i.e., not mandated under signatory obligations) but I will address this point anyway.

Within our assessments a detailed analysis of the potential impacts on water and sediment quality has been undertaken, and as part of that the uplift in concentrations of contaminants in the water column following disposal of dredge material has been examined. This involved considering the relative potential for each contaminant to change from one phase to another (i.e., whether a contaminant will adsorb to sediment surfaces or if it will dissolve in the water), the maximum incremental suspended sediment concentrations that could arise during disposal activities, maximum contaminant concentrations in sediment samples, and background water quality data – so it can very much be considered a conservative and precautionary assessment.

And, for PBDEs, the calculated uplift in dissolved concentrations is very low (less than 1% of background concentrations). This is because PBDEs do not dissolve in water and bind strongly to sediment surfaces, meaning they are not very mobile and less bioavailable. On this basis, and given the calculated concentrations, I am entirely satisfied that the proposed disposal would not cause even a short-term deterioration in water quality with regards to PBDEs. It is also worth highlighting that the proposed disposal sites are within the Humber Estuary, which means the sediment will remain within the same sedimentary system and not be transported to a different water body in any event.

Summary

This provides an update on the position with MMO and NE and both are considering all of our latest responses which we consider fully address their remaining questions.

Both organisations were very keen for us to highlight that discussions on these matters continue to be constructive and all parties consider it likely that each of the outstanding issues can be resolved as we work towards finalising Statements of Common Ground over the course of the next month. The Examining Authority will have also noted that that point is already reflected in each of their Principal Areas of Disagreement Statements.

In summary, we can confirm excellent progress has been made to address all the comments raised by Natural England and the MMO in their respective Relevant Representations and their subsequent Examination written submissions. That reflects the high level of detail into which the assessments have gone and the nature of the Proposed Development which has been comprehensively and robustly assessed as part of this process.

Appendix 4 – 12 December 2022 HASB Meeting Minutes

ASSOCIATED BRITISH PORTS
AS HARBOUR AUTHORITY AND SAFETY BOARD

Minutes of a meeting held on Monday 12 December 2022 at 11.40am at 25 Bedford Street, London, WC2E 9ES

Present:	H Pedersen (HP)	CEO (Chair)
	A Welch (AW)	Director, Southampton*
	J Walker (JW)	CCO*
	S Bird (SB)	Director, Humber
	M McCartain (MM)	Director, Safety, Engineering & Marine*
	M Wyatt (MW)	CFO
In Attendance:	A Morgan (AM)	General Counsel & Company Secretary
	B Hodgkin (BH)	Group Head of Projects
	P Bristowe	Head of Marine, Humber*
	O Peat	Project Manager*
	J Clark (JC))	Technical Authority Marine*
	T Aldridge (TA)	Senior Maritime Advisor, ABPmer*
Apologies:	A Harston	Director, Wales & SSP
	H van Weezel	CIO
	A Rumsey	CHRO

*By Teams

HASB 22/31 IERRT NAVIGATION RISK ASSESSMENT – PROJECT SUGAR

The Board noted the paper "IERRT Navigation Risk Assessment – Project Sugar" and that the purpose of the meeting was for the Board to consider the process and approach which had been undertaken in relation to the navigational risk assessment for IERRT. In particular, the Board would be asked to consider its approval to the conclusion that that the risks identified as part of the process were as low as reasonably practicable (ALARP) and tolerable.

SB gave an introduction and explained that it was important to put the project into the context of a busy port marine area with at certain times a high number of vessel movements in a relatively confined proximity to each other and port infrastructure. Immingham Oil Terminal (IOT) was to the east, Humber International Terminal (HIT) to the west, Immingham Outer Harbour also west further towards the land and then in between IOT and HIT/Immingham Outer Harbour was the lock entrance. Project Sugar involved putting more berthing infrastructure on the shoreside of IOT. Certain stakeholders such as APT (which operates IOT) and DFDS (which uses Immingham Outer Harbour) had expressed concerns relating to the impact on navigation in the river. It was critical to ensure that the correct approach to risk had been undertaken in relation to this project and that the Board was comfortable with the proposed conclusions.

BH and TA then presented a comprehensive and detailed overview of the process which had been undertaken to complete the navigational risk assessment (NRA) including discussion and consideration of the likelihood/consequence tables, the tolerability approach and the cost/benefit exercise which helped determine whether or not a risk was as low as reasonably practicable (ALARP) and tolerable. BH and TA also took the Board through each of the technical appendices to the paper explaining how they related to the specific areas of discussion (including the draft Navigational Risk Assessment, Tables 1 and 2, the explanation of ALARP, the Tolerability Tables and the summary reports from HR Wallingford of the navigational simulations). The following points in particular were discussed:

- The navigational risk process which had been undertaken involved a five-step process which was in accordance with the Port Marine Safety Code Guide to Good Practice. The steps included (i) hazard identification which involved consulting with a wide range of stakeholders to identity key hazards in regard to the construction and operation of the new marine infrastructure; (ii) risk analysis of those identified hazards; (iii) risk assessment of those hazards and

consideration of measures to control those risks; and (iv) a cost benefit analysis and assessment of identified risks to ensure they are ALARP and tolerable. The last step (v) was the final decision which was the approval sought by this Board. The output of this process was the NRA (a draft of which was appended to the paper).

- BH explained that it had not been a linear process and that there had been extensive stakeholder engagement though three HAZID workshops. This included a re-run of one of the workshops so that a large number of inputs from across the marine community could be taken into account.

- In addition to the HAZID workshops, there had been four rounds of vessel simulations undertaken by ABP's consultant HR Wallingford. These had involved four full bridge simulations using best in class simulation technology. There was discussion and consideration about the types of vessels which had been used in the situations and it was noted that in the future, vessels would be even more manoeuvrable than those used in the simulations. The conclusions set out in the HR Wallingford report were also considered and discussed.

- BH noted that there had been challenge from some of the stakeholders in regard to the accuracy of some of the input data used for the simulations, such as in relation to the current direction. To provide an extra layer of comfort to stakeholders, the project team had instructed additional surveys and simulations. The results of that additional work were as expected and validated the results of the earlier studies and simulations.

- A slide was presented on the "Key Risks" and there was discussion amongst the Board about the various key hazard scenarios, how the "worst case" and "most likely case" were applied and the methodology used to conclude the embedded risk outcomes. It was questioned about what would happen if a ro/ro vessel loses power coming into IERRT. OP explained that this had been covered by the simulations carried out and that based on the simulations if the vessel dropped its anchor, it would be stopped within a vessel length and well in advance of making contact with port infrastructure.

- In regard to embedded risk outcomes, it was noted that many of the risks identified were common risks for general marine operations at the port and there were already various embedded risk controls in relation to those risks.

- BH presented a slide on "further applicable controls" and "applied controls" which set out which "controls" were and were not intended to be applied to mitigate identified risks. There was a discussion about the controls and the Board considered the proposed application or disapplication of each of them. There was a question about impact protection measures (**IPM**). BH explained that the outcomes of the navigation simulations did not support the premise that IPM were required and it was confirmed that they were not considered necessary or required. IPM were still included as a potential 'project specific adaptive control' in case it was determined at some future point that IPM was required so the intention was to ensure that they formed part of the overall consent for the project. It was questioned why additional storm bollards and hooks with load monitoring had been discounted as a control measure. The Board was advised that it was considered that these were not appropriate as the mooring design and bollards would be designed and sized appropriately. It was further noted that relocating the finger pier had also been discounted as a control measure following the cost benefit analysis. Further marine navigational simulation work had demonstrated that the finger pier was not required to be relocated and would be able to continue to be operated in the same way as now.

- The "consequence and likelihood" tables were discussed and it was noted that the descriptions were consistent with ABP's MARNIS system and ABP's approach to assessing marine risk. The Board considered and discussed the tolerability limits in relation to each of the 4 areas (being people, property damage, planet (environment), port reputation/business risk). It was noted that after the cost benefit analysis stage, it had been concluded that all of the

risks were within the tolerability limits and had been deemed to be ALARP. Following a detailed discussion and consideration, the Board concluded that it agreed with that conclusion].

- It was noted that although the Navigational Risk Assessment report (appended to the paper) had been shared with the Board in draft form because it could not be finalised until after this meeting had concluded, subject to the views of the Board, it was not intended to be amended in any material way prior to submission as part of the DCO application.

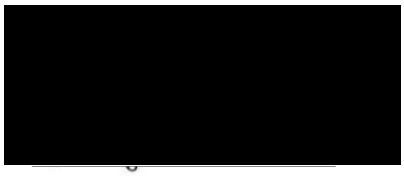
Following careful discussion and consideration, the Board confirmed that, on the basis of the information provided:

- it was satisfied with the approach taken to the marine navigational risk in relation to the future development of IERRT; and

- it agreed with and approved the conclusion that the risks identified were as low as reasonably practicable (ALARP) and tolerable.

The Chair noted the level of engagement with all stakeholders in order to hear and address concerns and the hard work and effort that had gone into the risk process which had been thorough and robust. All participants involved where thanked for their contribution.

There being no further business the Chair closed the meeting.



…….

Chair

Appendix 5 – 12 December 2022 HASB Meeting Presentation

Title:	IERRT Navigation Risk Assessment – Project Sugar		
Sponsor:	Simon Bird	**Status:**	For Approval
Harbour Authority Safety Board Meeting Date:	12/12/22		

1. Executive Summary

The purpose of this paper is to request approval of the Harbour Authority Safety Board (**Board**) to the approach taken to the marine navigation risk in relation to the future development of the Immingham East Roll-on, Roll-off Terminal (**IERRT**). In summary:

- A Navigational Risk Assessment (NRA) has been carried out in accordance with industry guidance.
- As part of the NRA process there has been extensive consultation with stakeholders and various technical studies undertaken.
- The NRA process involves consideration and assessment of hazard scenarios.
- The overall result of the NRA process is the definition of 28 hazard scenarios and once the controls are applied, these are assessed to be both tolerable and 'as low as reasonably practicable' (ALARP).
- Additional simulations and modelling were undertaken to address the concerns of some stakeholders. These took place following the third Hazard Identification workshop and aligned with expectations and have increased confidence in the assessment overall.

This paper requests that the Board, in its role as Duty Holder, considers the approach taken to the marine navigation risk in relation to IERRT and in particular considers and if so minded approves:

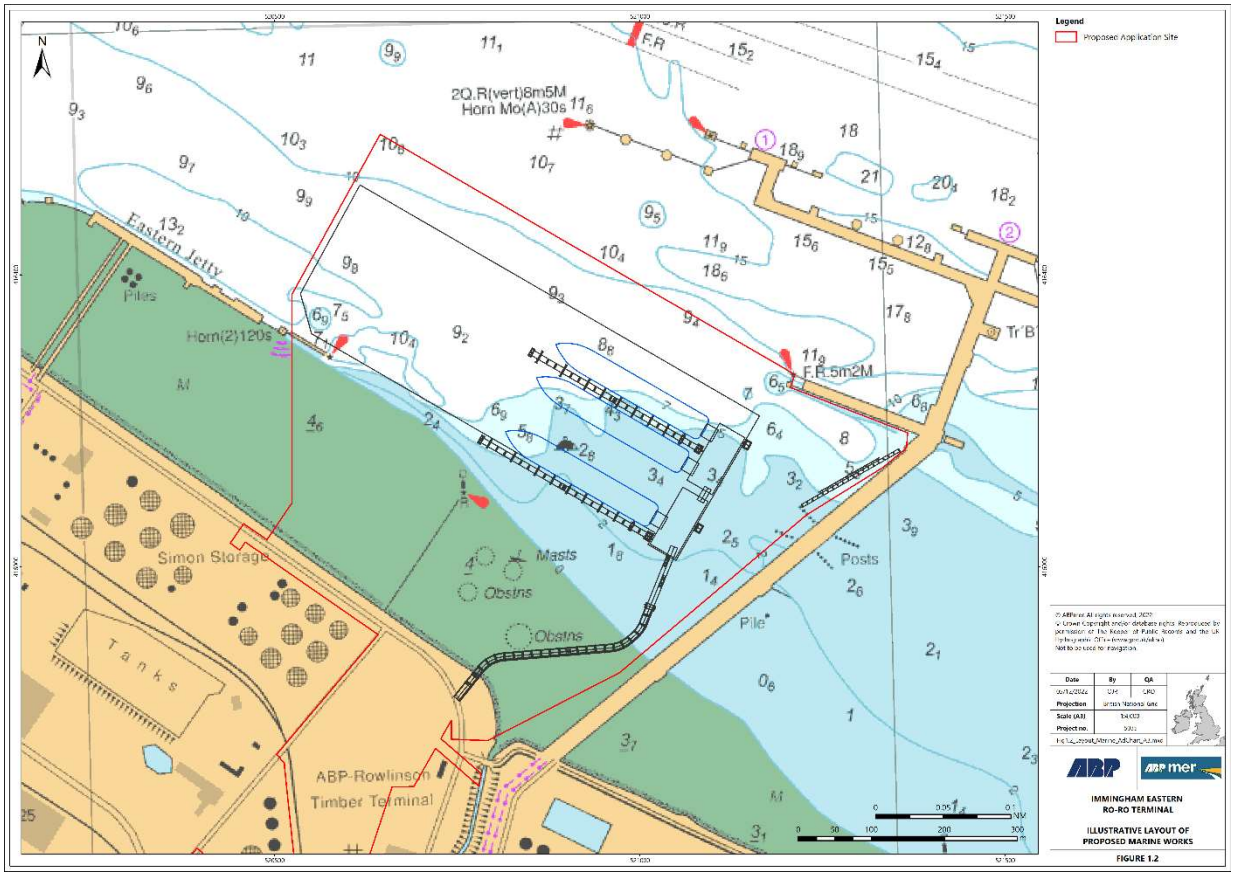
- the descriptors for the criteria shown in Appendix A.
- the tolerability as detailed in each of the four criteria in Appendix B.
- the risk assessments in Appendix C, **noting** that all presented risks are both tolerable and ALARP.

Background: Proposed Development Overview

Stena Line Holding BV (**Stena**) is one of the largest ferry operators in Europe operating with 37 vessels and 17 ferry routes. The new IERRT facility will provide three new berths for Stena RoRo vessels. It will be built behind the Immingham Oil Terminal (IOT) and adjacent to the IOT Finger Pier at the port of Immingham (**Port**).

The figure below shows the redline boundary of the proposed IERRT development at the Port, a black outline for the dredge pocket and an engineering drawing of the proposed development overlaid on the navigation chart. The structure immediately to the East of the proposed development is the IOT.

The IOT is currently operated by Associated Petroleum Terminals Limited who operate tankers and bunker barges off the finger pier in addition to other berthing positions on the terminal.



To access the New Berths from the land, a 290 m long, 11 m wide jetty will be constructed to provide vehicles access. Two floating pontoons will be provided to accommodate the loading and unloading ramps of berthed RoRo vessels. A single linkspan bridge will carry a roadway, a separate footway, lighting, utilities, and environmental screens. Two open piled finger piers approximately 270 m in length and 6 m in width with concrete decks will be constructed, positioned perpendicular to each other for vessel berthing. The figure also shows vessel impact protection adjacent to the IOT trunkway (to the South of the Finger Pier). It is not considered that such measures are necessary or required but it has been decided to make provision for them in the Development Consent Order for the project so as to ensure that the infrastructure is consented should it be determined at some future date that they are required.

2. NRA Process

ABPmer, who are experienced in NRA processes, were appointed to undertake an NRA for IERRT. The purpose of the NRA was to assess the marine navigational risk in relation to IERRT. It accompanies the Environmental Statement (which forms part of the application for the development consent order for the project) as a technical appendix. The NRA will be considered by regulators as part of the DCO process and may come under scrutiny if parties wish to object. For this reason, the NRA uses a five-stage industry standard process that is in accordance with the Port Marine Safety Code's Guide to Good Practise.

1. Identification of hazard scenarios (through Hazard Identification (HAZID) workshops).
2. Risk Analysis (determination of frequency and consequence for each hazard scenario in the context of causes, controls, and mitigation).
3. Risk Assessment and control options (consideration of embedded controls, causes, embedded risk outcomes, further applicable controls, mitigation and, potential risk outcomes).
4. Cost-Benefit Analysis.
5. Recommendations for Decision-Making.

Stages 1 & 2

To inform stages 1-2, there was extensive consultation with various stakeholders including, three HAZID workshops as follows:

Workshop on 29 October 2021:

This was attended by representatives from ABP's marine and project teams, ABP's port of Immingham (ABP IMM), ABP Humber Estuary Services (HES) and ABPmer.

The output informed the Provisional Environmental Impact Report (PEIR) which is an early stage document that precedes the final Environment Impact Assessment, of which, the NRA is an appendix to the Shipping and Navigation Chapter.

Workshop on 07 April 2022:

This was attended by representatives from ABP, HES, ABPmer and a number of other customers of the Port including Stena Line, APT, DFDS, CLdN Cobelfret.

The output informed the Hazard Logs which were circulated for comment to attendees.

Workshop on 16-17 August 2022:

This was attended by representatives from the ABP marine and project team, ABP IMM, HES, ABPmer, Stena Line, APT, DFDS, HR Wallingford, NASH, Bishop Consulting, Exolum, Svitzer, RIX and James Fisher Everard. These stakeholders were identified by the project team and the Harbour Master as the concerned parties regarding the proposed development.

This workshop failed to reach consensus on Hazard Scenarios and further applicable risk controls. Extensive comments were received with widely varying viewpoints.

Stage 3

Following the August workshop referred to above, a Risk Assessment meeting was held on 04 October 2022 (stage 3) between the ABPmer Maritime department to review the

correspondence received following the third HAZID workshop. This meeting specifically sought to ensure that all stakeholder opinions had been considered and were represented in the Hazard Log. The outcome of this meeting determined that the assessed risks were ready to be considered by the ABP Project Team in a Cost-Benefit Analysis meeting.

Stage 4

Following the Risk Assessment meeting, the Cost-Benefit Analysis meeting was held on 06 October 2022 to evaluate the risk controls from the Hazard Logs (stage 4). Attendees at the Cost-Benefit Analysis meeting included members of the ABP Project Team, ABPmer, the HES Harbour Master, and Clyde & Co (legal team). The summary of this meeting was presented to the ABP SteerCo including the position of tolerability that was reached and the recommended 'Applied Controls' ('Further Applicable Controls' to be taken forward) on 09 October 2022.

Stage 5

Final approval for the navigation risks associated with the proposed development is presented to the Board through this paper (stage 5 of process as defined above and in the NRA).

3. NRA Principles

The UK National standard for the safe and efficient running of ports is the Department for Transport's 'Port Marine Safety Code' (PMSC; 2016) and its accompanying document 'A Guide to Good Practice on Port Marine Operations' (GtGP; 2018). For the purposes of the PMSC, the Duty Holder (i.e., the ABP HASB) is (amongst other things) responsible for ensuring that the Harbour Authority discharges its responsibilities for safe and efficient port marine operations and for ensuring marine risks are formally assessed and mitigated to a point concluded to be 'as low as reasonably practical' (ALARP).

This means that any hazard scenario needs to be assessed and, regardless of whether that scenario produces a minor or more significant risk, consideration needs to be given to ensure that the risk overall is ALARP. The GtGP, 2018 states the hierarchy of risk control is to:

- "Eliminate risks by avoiding a hazardous procedure or substituting a less dangerous one;
- Combat risks by taking protective measures to prevent risk; and
- Minimise risk by suitable systems of working. If a range of procedures are available, the relative costs need to be weighed against the degree of control provided, both in the short and long term".

Further, the concept of 'tolerability' seeks to define the point at which a risk has an unacceptable outcome, as a function of frequency and consequence, when measured against key criteria. These criteria (also termed receptors) in respect of marine safety are defined in the GtGP as:

- human life;
- the environment;
- port/port user operations; and
- port/shipping infrastructure damage.

Descriptors for the criteria are established separately for each of the four receptors (named people, planet, port (business/reputation), and property by ABPmer). For ABP, in general and for this project, associated consequence descriptors are detailed in Appendix A along with the likelihood descriptors which together form a 5x5 grid known as the risk matrix.

Tolerability is the limit as per consequence and likelihood of an hazardous scenario occurring up to the limit that the responsible authority deems acceptable. Using the risk matrix, tolerability is defined as a line which demonstrates the likelihood and consequence limits of acceptability. Appendix B displays this for each receptor (people, planet, port, and property) which can be interpreted as the line at which a risk outcome goes from being tolerable to intolerable for this proposed development.

For example the People Tolerability Matrix displays that a 'possible' likelihood of a risk occurring with a consequence of 'serious injury(s)' is tolerable but that a 'possible' likelihood of another risk occurring with a consequence of 'single fatality' is intolerable.

Determining whether the predicted level of risk is acceptable requires a two-part test:

- Firstly, is the risk mitigated to ALARP,
- Secondly, is the risk tolerable.

This means that where risks are identified to be ALARP, they can be accepted if that position is within tolerability limits.

4. Outcome

As part of the IERRT project's NRA, 28 hazard scenarios were identified. These were split into 12 during the construction phase, 7 during construction/operation and 9 during the operational phase.

The hazard log (Appendix C) includes 29 'Further Applicable Controls' (i.e. additional controls to address hazards) which were suggested by attendees during the HAZID workshops.

Following the Cost-Benefit Analysis, 24 of the 29 Further Applicable Controls were taken forward as future mitigation (i.e. it is recommended that these be implemented; 'Applied Controls) as well as the inclusion of 5 new controls that were previously not identified (further explained in Table 2):

- Closure of 'F' Anchorage
- Constructor RAMS (Risk Assessment Method Statement)
- Control of contractors through management
- Harbour Master's consent of works
- Site specific Dredge Plan

Following application of the 'Applied Controls', the resultant risk level for all of the 28 hazard scenarios were assessed to be both **tolerable** and **ALARP** using ABP's criteria (Appendix A) and tolerability threshold (Appendix B).

To assist the Board in assessing the proposed 'Further Applicable Controls' not applied and all of the 'Applied Controls' which will be applied, the following tables have been provided.

Table 1 Further Applicable Controls not applied

Risk Control	Rationale
Additional Storm Bollards	The terminal and berths will be designed and constructed to the appropriate specification which is also informed by a mooring study. Additional storm bollards are therefore surplus to requirement offering minimal additional mitigation.
Hooks with load monitoring	The terminal and berths will be designed and constructed to the appropriate specification which is also informed by a mooring study.

	Vessels berthed at the IERRT will be continuously monitored by personnel onboard the vessel which when berthed includes the state of lines, therefore hooks which can monitor loads on the lines are not required and would provide minimal mitigation.
Increase size of dredge pocket	The proposed dredge pocket for this scheme design is appropriate. Whilst increasing the size of a dredge pocket would inherently reduce the risk of grounding it is not reasonably practicable to do so as the area identified for dredging is sufficient.
Moving the Finger Pier	Moving the Finger Pier to eliminate risks associated with the allision/collision of a RoRo vessel with the IOT Finger Pier or to reduce the risk of a Tanker having an allision/collision with the IERRT is not reasonably practicable. The associated costs to remove the finger pier and establish a new berth in an alternative location far exceeds the reduction in risk proposed in the HAZID workshops.
Suitable PPE for construction personnel	This control was in consideration of additional PPE as thermal protection for 'Man overboard'. Although additional PPE to potentially prevent exposure if a person found themselves in the water may be desirable, it would likely render the individual unable to effectively conduct construction activities due to the nature of the PPE. In consideration of other controls in place the associated risk for this further applicable control was deemed to be ALARP.

Table 2 Applied Risk Controls

Risk control	Details	Relevant phase of project		
		Construction	Construction-Operation	Operation
Marking construction area (exclusion zone)	A vessel exclusion zone whilst construction is taking place	x		
Guard (support) vessel	Available as appropriate - able to prevent flat top barge from drifting onto the Eastern Jetty or is otherwise able to reduce the speed and impact of the resulting allision	x		
Designated safety craft	This control specifically considers a vessel being available and specifically designated for safety, in particular to respond to a 'Man Over-Board' recovery situation	x		
Incident Reporting - Dropped component	During the construction there is potential for items to be dropped in the water and cause a risk to navigation. The contractors should have a procedure agreed with the SHA for actions to be taken if large item is dropped during the construction phase.	x	x	
Loading/Unloading Plan	Equipment and materials being delivered by barge will require plans for the order and	x		

	method of loading and unloading at the marine works site			
Personnel management during tanker berthing	Ensuring that personnel that are in vicinity of the Finger Pier are aware and alert whilst tankers are berthing	x		
Additional measures to ensure separation of marine works from Ro-Ro vessels proceeding to or departing IERRT	Consideration for VTS to move marine craft away from pier being berthed on prior to Ro-Ro arriving in the berth pocket		x	
Berthing criteria specific to operation-construction	This control describes the potential inclusion of elements such as tidal limits, tug requirements, amidst other potential weather limits (e.g. high winds) that are specific to whilst operation and construction occur simultaneously.		x	
Special Instructions issued to Ro-Ro not to berth unless area is clear of marine works craft	The application of a special instruction for Ro-Ro's not to berth unless marine craft are clear		x	
Additional pilotage training/ familiarisation	Additional training and familiarisation for pilotage		x	x
Additional training to PEC and Pilots on manoeuvring during the operation-construction phase	Specifically for risk C.5 and C.7, for Pilots/PECs on all 3 berths		x	
Berth specific weather parameters	Having defined weather parameters for each berth, acknowledging their different operational limits		x	x
Charted safety area, berthing procedures	A charted exclusion zone for vessels to remain clear of		x	x
Barges cannot be moored in the vicinity of a berthing Ro-Ro	Eliminating the practise of a barge being moored whilst Ro-Ro berthing operations occur		x	
Closure of 'F' anchorage	Eliminating the use of Anchorage F during dredging operations	x	x	
Contractor RAMS	Contractors would require RAMS covering all of the construction activities which will require review by the Harbour Authority prior to the commencement of activities	x	x	
Control of contractors through management	Control and management of contractor actions	x	x	
Harbour Master's consent of works	Harbour Masters assessment of safe working practise and then consent to conduct the works	x	x	

Port Liaison Officer	A Liaison Officer to coordinate between the port and contractors	x	x	
Post Construction Hydrographic Survey	A bathymetric survey specifically after construction to identify the existence of any dropped components	x	x	
Project specific adaptive procedures	Adaptive procedures during familiarisation period as operational experience gained (e.g., tugs, tidal restrictions, delayed start of use of berth 1 during familiarisation period, impact protection)		x	x
Site specific dredge plan	Dredge plan that considers operating in suitable relation of the prevalent tidal flows in the vicinity of the IOT trunk way	x	x	
Specific berthing criteria for each of the three berths	Specific criteria in terms of limitations for the utilisation of each of the three berths		x	x
Marking safe water with AtoN	An AtoN placed between the IERRT and the Eastern Jetty to provide a visual appreciation to support vessels of where the safe water limits are			x
Notices to mariners	Detailing impacts and directions for each stage of the marine works (embedded control applied additionally to specific risk C11 in Appendix 10.1)	x		
Tidal Restrictions	Measure to restrict movements depending on tidal streams (can also be applied as part of project specific adaptive controls)	x		

5. Annexes

Although Appendices A, B, and C, provide full context with respect to the risks themselves. It is advised that the HASB also considers the NRA draft provided as Annex A. These documents contain the full detail and context in which these risks have been considered. Also included in Annex B & C are two reports from HR Wallingford setting out the Navigational Simulations undertaken pre HAZID three and post HAZID 3 respectively.

Appendix A - Matrix Descriptors

Likelihood Descriptors

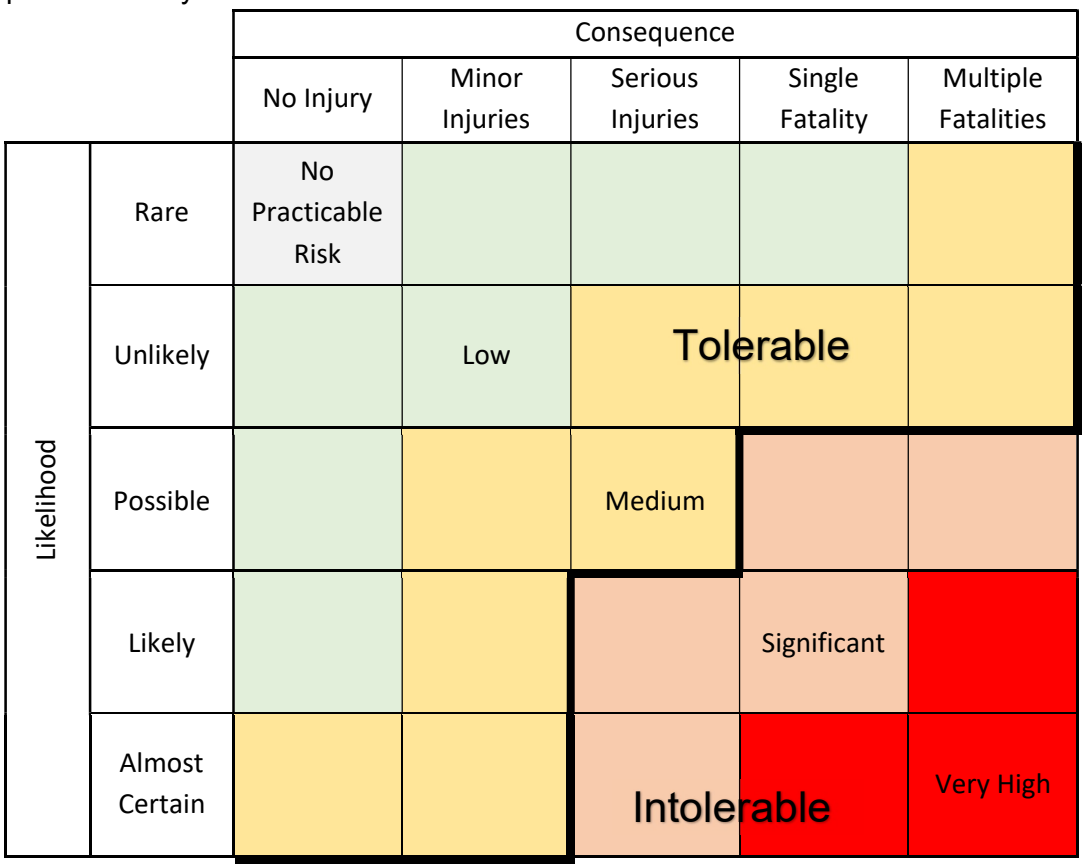
Likelihood Descriptors	Likelihood
The impact of the hazard is realised but should very rarely occur (within the lifetime of the entity)	Rare (1)
The impact of the hazard might occur but is unlikely (within the lifetime of the entity)	Unlikely (2)
The impact of the hazard could very well occur, *but it also may not* (within the lifetime of the entity)	Possible (3)
It is quite likely that the impact of the hazard will occur (within the lifetime of the entity)	Likely (4)
The impact of the hazard will occur (within lifetime of entity)	Almost Certain (5)

Consequence Descriptors

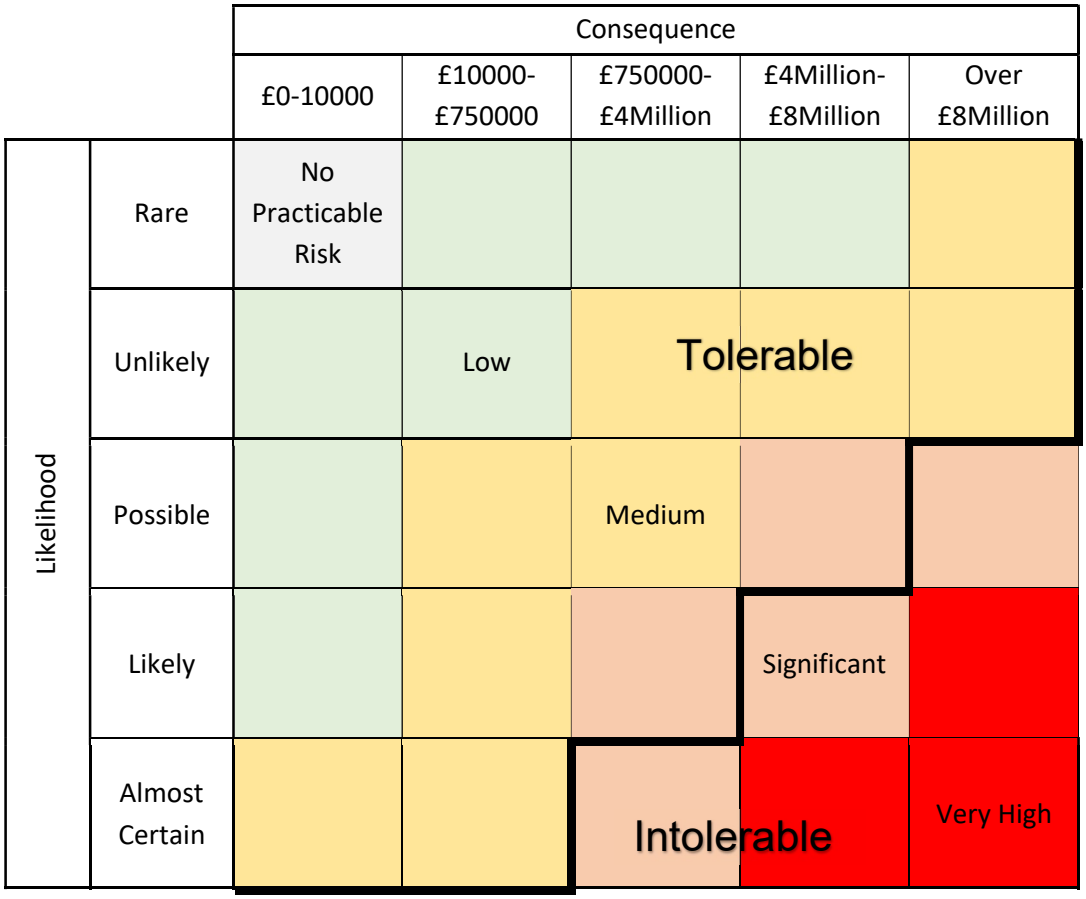
Consequence Descriptors	Consequence
Consequence Descriptors: People	
No injury	Negligible (1)
Minor injury(s)	Minor (2)
Serious injury(s) (MAIB/RIDDOR reportable injury)	Moderate (3)
Single fatality	Major (4)
Multiple fatalities	Extreme (5)
Consequence Descriptors: Property	
Negligible (£0 - £10,000)	Negligible (1)
Minor (£10,000 - £750,000)	Minor (2)
Moderate (£750,000 - £4m)	Moderate (3)
Serious (£4m - £8m)	Major (4)
Major (> £8 million)	Extreme (5)
Consequence Descriptors: Planet	
None (No incident - or a potential incident/near miss)	Negligible (1)
No Measurable Impact (An incident or event occurred, but no discernible environmental impact - Tier 1 but no pollution control measures needed)	Minor(2)
Minor (Incident results in pollution with limited/local impact - Tier 1, Harbour Authority pollution control measures deployed)	Moderate (3)
Significant (Has the potential to cause significant damage and impact – Tier 2, pollution control measures from external organisations required)	Major (4)
Major (Potential to cause catastrophic and/or widespread damage - Tier 3, requires major external assistance)	Extreme (5)
Consequence Descriptors: Port (Business/Reputational)	
None	Negligible (1)
Minor (Little local publicity. Minor damage to reputation. Minor loss of revenue, £0 - £750,000)	Minor (2)
Moderate (Negative local publicity. Moderate damage to reputation. Moderate loss of revenue, £750,000 - £4m)	Moderate (3)
Serious (Negative national publicity. Serious damage to reputation. Serious loss of revenue, £4m - £8m)	Major (4)
Major (Negative national and international publicity. Major damage to reputation. Major loss of revenue, > £8 million)	Extreme (5)

Appendix B – Tolerability

People Tolerability Matrix



Property Tolerability Matrix



Planet Tolerability Matrix

Likelihood		Consequence				
		No pollution	Tier 1 – No measurable impact	Tier1	Tier 2	Tier 3
	Rare	No Practicable Risk				
	Unlikely		Low	Tolerable		
	Possible			Medium		
	Likely				Significant	
	Almost Certain				Intolerable	Very High

Port Tolerability Matrix

Likelihood		Consequence				
		None	Minor Reputation Damage	Moderate Reputation Damage	Serious Reputation Damage	Major Reputation Damage
	Rare	No Practicable Risk				
	Unlikely		Low	Tolerable		
	Possible			Medium		
	Likely				Significant	
	Almost Certain				Intolerable	Very High

Abbreviations/Acronyms

Acronym	Definition
ABP	Associated British Ports
ABPmer	ABP Marine Environmental Research Ltd
ALARP	As Low As Reasonably Practicable
APT	Associated Petroleum Terminals (Immingham) Ltd
CHA	Competent Harbour Authority
CLdN	CLdN Group
COLREGs	International Regulations for Preventing Collisions at Sea 1972
DCO	Development Consent Order
DFDS	Det Forenede Dampskibs-Selskab
DfT	Department for Transport
EIA	Environmental Impact Assessment
ES	Environmental Statement
GtGP	Guide to Good Practice on Port Marine Operations
HAZID	Hazard Identification
HES	Humber Estuary Service
IERRT	Immingham Eastern Ro-Ro Terminal
IMM	Immingham
IOT	Immingham Oil Terminal
MARNIS	Marine Accident Incident Reporting Database
MCA	Maritime and Coastguard Agency
MSMS	Marine Safety Management System
NASH	NASH Maritime Ltd.
NPR	No Practicable Risk
NRA	Navigational Risk Assessment
PEIR	Preliminary Environmental Information Report
PMSC	Port Marine Safety Code
PPE	Personal Protective Equipment
RAMS	Risk Assessment Method Statement
Rix	Rix Petroleum Ltd.
Ro-Ro	Roll-On/Roll-Off
SHA	Statutory Harbour Authority
SteerCo	ABP Steering Committee

Appendix 6 – A160 Flow Validation Note

1.1 Paragraph 34 of the REP3-022 submission by DFDS suggests that data captured by them in 2022 (REP1-029) showed traffic volumes on the A160 around 20% higher than the applicants' 2021 figures. They have requested further data to justify the baseline traffic flows adopted in Transport Assessment.

1.2 The data referred to by GHD in REP3-022 is confirmed to be derived from the traffic count undertaken by them (in June 2022) and reported at Pages 356 – 382 at REP1-029.

1.3 The peak hour flows shown in this data on the section of the A160 east of the Habrough Roundabout can be seen in **Table 1** below.

Table 1 - Surveyed Flows on A160 East of Habrough Roundabout (total vehicles) June 2022 by GHD

DFDS Survey	Westbound	Eastbound	Total
AM (0700-0800)	513	1069	1,582
PM (1600-1700)	860	406	1,266

1.4 The corresponding data as adopted in the applicants Transport Assessment (AS-008) can be obtained from the base survey for the Habrough Roundabout (Page 1320). The peak hours of this data can be seen in **Table 2** below.

Table 2 - Surveyed Flows on A160 (total vehicles) November 2021 by DTA

Applicants Survey	Westbound	Eastbound	Total
AM (0700-0800)	507	1,215	1,722
PM (1600-1700)	1,076	452	1,528

1.5 As can be seen above the data adopted within the TA is robust in that it is higher (except for the Westbound flows in the AM peak where the flows are at a similar level) than that surveyed by GHD in 2022.

1.6 To further validate the flows adopted in the TA, reference has been made to data extracted from National Highways WebTRIS data (webtris.highwaysengland.co.uk). This is a permanent count site located to the west of Habrough Roundabout.

1.7 The A160 junction flows used in the junction assessments have also been validated against the 2023 flows in the same way that other junctions have been validated in REP1-009.

1.8 The 2021 A160 flows have been taken from the A160 W arm of the Habrough Roundabout junction count (Page 1322 of AS-008) and the 2023 A160 flows have been taken from available National Highways WebTRIS data (webtris.highwaysengland.co.uk). Data is available from March to June 2023 eastbound and June 2023 westbound. Excluding holiday periods, **Table 3** below compares 5-day average flows from that dataset with the TA.

Table 3 - Comparison of 2021 and 2023 total flows on the A160 (between A180 and Habrough Roundabout)

	TA Surveys	2023 Update	Difference
07:00-08:00	1946	1612	-334
16:00-17:00	1674	1339	-335

1.9 This shows that the flows adopted in the TA are significantly higher than the prevailing average flows recorded in 2023. The surveyed flows informing the assessments in the TA are therefore clearly very robust with higher flows adopted than would be the case if the 2023 surveys were adopted.