KEEPING BRITAIN TRADING

IMMINGHAM EASTERN RO-RO TERMINAL

Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 5 with Appendices

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1 Executive Summary and Purpose

1.1 Issue Specific Hearing 5 ('ISH5'), during which consideration was given to the issue specific topics of **Navigation and Shipping** and **Onshore Transportation** was held on Tuesday 21 November 2023 and Wednesday 22 November 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 ISH5.

1.2 At **Table 1** below, this document provides a summary of the submissions and responses made by the Applicant, Associated British Ports during ISH5 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 ISH6 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 5

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 the following individuals in relation to ISH5 agenda item 2, navigation - • Mr Mike McCartain (ABP Group Director of Safety, Marine and Engineering); • Cdr Paul Bristowe (ABP Head of Marine, Humber); • Mr James Hannon (of ABPmer); • Mr Mike Parr (of HR Wallingford); and • Mr Ben Hodgkin (ABP Group Head of Projects). Mr Strachan explained that he would introduce those supporting the Applicant in relation to later agenda items in due course.
Agenda Item 2 – Navigation and Shipping		
2.	The ExA asked the Applicant to explain the assumptions they have made in regard to the re-use of parts of the Inner Dock at Immingham and Port of Killingholme that would be vacated by Stena Line.	Mr Strachan, on behalf of the Applicant, stated that the Applicant's assumption is that those slots will be filled, as shown within the Applicant's NRA [APP-089] at Section 5.3 and Table 13 and elsewhere. Mr Strachan KC explained that the IERRT development would give rise to multiple additional movements as it was assumed that current movements would remain, albeit possibly utilised by another operator.

		Mr Strachan then indicated that currently in the Immingham Inner Dock, there is one Stena Line vessel which generates two movements per day. Under the IERRT proposal, there would be the addition of 3 vessels and up to six movements per day. DFDS and the Harbour Master Humber stated that they also understood that the IERRT development would generate 6 additional movements per day, in that the Inner Dock would continue to be utilised.
3.	The ExA asked the Applicant what assumptions have been made about spare capacity at Killingholme.	Mr Strachan, on behalf of the Applicant, stated that the same assumptions had been made for Killingholme as for Immingham in that, in so far as navigational risk is concerned, the present number of movements at Killingholme were assumed to continue. Mr Strachan drew the ExA's attention to the Harbour Master Humber's response to ExQ2 in Table 1 [REP4-033] which showed movements on the Humber during 2003, 2022 and 2023. Mr Strachan noted that there were on average 86 commercial shipping movements per day in 2003 with a maximum of 116. He compared this with 2022 where there were on average 61 commercial shipping movements per day with a maximum of 80, demonstrating a marked decline in movements on the Humber and around Immingham over the 20-year period. Mr Strachan pointed out that this was an important part of any consideration of congestion or the movement assumptions which have been made by the Applicant. CLdN agreed with the assumptions made by the Applicant in relation to the Port of Killingholme.
4.	The ExA asked the Applicant about the composition and purpose of the Senior	Mr Ben Hodgkin, on behalf of the Applicant, explained that a proposed Senior Safety Workshop was the result of an offer by the CEO of ABP

	Safety Workshop and the Commercial Workshop, which were referenced in DFDS submission [REP2-039]. The ExA also asked what a SteerCo meeting is.	to DFDS for a meeting on safety matters to be attended by high level executives of the respective organisations. Mr Hodgkin stated that offering this meeting showed how seriously ABP took the safety issues raised by key stakeholders. Mr Hodgkin then explained that the Commercial Workshop had resulted from a direct request by DFDS so that they could better understand the commercial implications of the IERRT development on their operations. Mr Hodgkin stressed that this was completely detached from any conversations on safety. Mr Hodgkin then proceeded to describe the 'SteerCo' which is short for 'Steering Committee'. Mr Hodgkin emphasised that this Committee is simply a standard governance methodology employed at ABP and is something applied to all of their projects. Mr Hodgkin explained that SteerCo takes the format of a monthly review where the executive team go through project status, risk etc. Mr Hodgkin described the format as a meeting chaired by the project sponsor (which in this case is Mr Simon Bird, ABP's Regional Director for the Humber) and attended by the project and regional leadership teams, with discussion on project updates from the preceding month. **Post-hearing submission** A response explaining the reasoning for the cancellation of the 'Senior Safety Workshop' and 'commercial workshop' is set out at Action Point 17 below.
5.	The ExA asked the Applicant for further information regarding the risk assessment and cost benefit analysis meetings held on	Mr Ben Hodgkin, on behalf of the Applicant, stated the outcomes of the two meetings were captured in the HAZID logs which are appended to the NRA, these logs serving as the record of the meeting. Mr Hodgkin

	4 and 6 October 2022 referenced in the NRA and, in particular, who attended and whether these were minuted.	proceeded to explain that the meetings were not formally minuted, and it was common in project meetings to note the outcomes and actions rather than to keep verbatim minutes. Mr Hodgkin explained that the first meeting (4 October) on risk assessment was a project level meeting and the second on 6 October reviewed the HAZID logs and considered the cost and benefit of the controls put forward. This meeting was attended by himself, Commander Bristowe and the Harbour Master, Humber. This meeting is recorded in the NRA. . Captain Mike McCartain, acting Designated Person, on behalf of the Applicant, added that the previous Designated Person did not attend those meetings in order to maintain independence. This allowed the Designated Person to step back and solely look at the facts. Captain McCartain explained that the records of the meetings were the risks and actions within the HAZID logs. These formed a succinct and informative record of what needed to be actioned. The NRA then discusses these risks, deciding the necessary actions. The HAZID logs are all that are required, rather than tomes of minutes which are difficult to distil into the NRA discussion.
6.	The ExA asked about input work which informed the Cost Benefit Workshop on 6 October.	Mr Ben Hodgkin, on behalf of the Applicant, stated that there was input work done prior to the 6 October 2022 workshop in order to assess both costs and benefits. This was then assessed during the meeting as part of a dynamic discussion regarding various control measures which relied upon the expertise of those in the room. The amount of information which informed the cost benefit discussions was deemed appropriate for the level of control measures were being

		debated, as the control measures had been identified from HAZID workshops and other stakeholder engagement. Mr Hodgkin explained that the only control measure not put forward to the board was the relocation of the finger pier, with no other control measures which had been identified being discounted. Mr Hodgkin stated that, on that basis, the cost benefit was relatively narrow in scope and reasonably clear cut. Mr Strachan, on behalf of the Applicant, then responded to the ExA's comment on its experience of keeping records of cost benefit analysis meetings in relation to planning enforcement notices and National Highways matters. Mr Strachan KC differentiated these from the matter at hand and urged caution in any comparison as National Highways are accounting for the use of public money in accordance with Department for Transport requirements and the cost-benefit analysis in relation to enforcement notices is subject to specific guidance. These are clearly different from discussions of commercially confidential information.
7.	The ExA, looking at [AS-027], Notification Report, paragraph 2.31, asks whether the Immingham Dock Master or the HASB is the duty holder.	Mr Strachan, on behalf of the Applicant, explained that it is members of the HASB who together constitute the "Duty Holder". Mr Strachan goes on to say that a separate note has been provided which deals with the various bodies and persons as well as how they interact [REP1-014]. Mr Strachan stated this is a feature of Ports generally in terms of the overlap between different bodies.
8.	The ExA asked if the reference to the SHA in the Applicant's review of the IOT NRA [REP6-031] meant the SCNA or the HASB.	Mr Strachan, on behalf of the applicant, stated that this reference was to the Statutory Conservancy and Navigation Authority. To be clear, however, reference to the SHA in the Applicant's review of the IOT NRA

		[REP6-031] is relevant to both the Statutory Conservancy and Navigation Authority and the Port of Immingham SHA. Captain Mike McCartain, on behalf of the Applicant, explained that the HASB's function as the Duty Holder was to act as a governance body for all of the Applicant's 21 SHA's.
9.	The ExA asked whether Table 32 of the Applicant's NRA [APP-089] summarised the risk outcomes assessed after the 4 and 6 October meetings and if they correlate to the HAZID logs which are appended to the NRA?	Mr James Hannon, on behalf of the Applicant, confirmed that this was the case.
10.	The ExA asked how the risk assessment which has been undertaken will be considered in due course, then subsequently applied to a Safety Management System for the Port of Immingham? Which body finalises that Safety Management System – is it the SCNA or the Port of Immingham SHA?	Cdr Paul Bristowe, on behalf of the Applicant, stated that the operating manual for future IERRT will fall under the remit of the Port of Immingham SHA. The final document sign off will be by the Dock Master for the Humber, having been produced in collaboration with the Harbour Master Humber.
11.	The ExA asked which body determines the acceptability of risk subject to applied controls?	Cdr Paul Bristowe, on behalf of the Applicant, explained that the ultimate Duty Holder is the HASB but the advice presented to that will come up through the Port of Immingham SHA and if necessary the Harbour Master Humber as the Humber SHA and CHA.

12.	The ExA asked for confirmation the Dock Master team for Port of Immingham SHA must determine their comfort with the acceptability of risk which is then reviewed by the Harbour Master Humber (with overlapping jurisdiction) before the Marine Team and finally the HASB decide whether they agree or disagree with the acceptability of the risk.	Cdr Paul Bristowe, on behalf of the Applicant, stated that this characterisation was correct. Operational controls at any other terminal on the Humber are constantly as part of a collaboration between the Dock Masters at ABP's four Humber ports and the Harbour Master Humber. Cdr Bristowe continued by explaining that this process allows them to understand whether something needs a final sign off by the Harbour Master when it pertains to the river or the Dock Master if it is to do with the Port. Commander Bristowe concluded that this is all laid down in legislation.
13.	The ExA requested evidence of how the Applicant has paid specific regard to Stakeholder views both prior to submission of the Application and also subsequently.	Mr Strachan, on behalf of the Applicant, agreed to provide such evidence, but cautioned against the characterisation made that stakeholder views had not been considered. There is a real difference between considering different views and agreeing with those views. Mr Strachan also responded to DFDS's claim that a commercial workshop was cancelled without reason, stating that there were in fact a number of reasons which the Applicant will be outline in writing – for example, the lack of senior representatives being fielded. **Post Hearing Submission:** This is evidenced in the latest update of the Applicant's NRA (application document reference 8.4.10(a)), as submitted at Deadline 7. Section 6.2.3 of the NRA outlines the process of hazard identification and risk assessment. ABP take fully into account the relationships between the SHA, the port authority, terminal operators, and relevant vessel operators.

		Section 7 of the NRA outlines and evidences the Hazard Identification Workshops, lists the stakeholders in attendance and any views and concerns that were raised.
14.	The ExA asked DFDS whether they could justify disagreeing with the subjective judgement of the Duty Holder on tolerability.	Mr Strachan, on behalf of the Applicant, stated that it is for the Duty Holder to make those judgements based on the information provided, and the very nature of a process such as this will mean that not everyone will agree with the outcome. As any decision on tolerability sits with the Duty Holder, Mr Strachan questioned the benefit of the IOT and DFDS NRAs [REP2-064 and REP2-043], documents which appeared unnecessary considering the statutory responsibilities of the SHA and HASB existing under the legislation. There are both Public Law and general liabilities which flow from these responsibilities, including on independent bodies such as the Harbour Master Humber who has a statutory duty to fulfil. So there are clearly other statutory regimes which apply to this infrastructure that are not supplanted by the DCO and sit alongside, which again require compliance.
15.	The ExA asks whether there is a relationship between the Applicant's NRA and the Port of Immingham NRA and, if so, whether this could be more obvious in the Applicant's NRA.	Mr James Hannon, on behalf of the Applicant, explained that the baseline for existing controls contained within the Marine Safety Management System for both the Port of Immingham and HES are contained within the NRA and are considered. The Applicant is content to better demonstrate the correlation between the Applicant's NRA and the Port of Immingham risk assessment for marine operations and respective Marine Safety Management System which forms the embedded controls, inclusion of which is mentioned at section 6.4 of the NRA (document reference 8.4.10(a)).

16.	The ExA invited the Applicant to provide a response to various points that had been raised from IP's on the Applicant's NRA.	Mr James Strachan began by stating that the ExA have before them both the Applicant's NRA and an explanation of the methodology that has been adopted, including the approach to the identification and then assessment of risk and consequence and the reasons for the methodology which has been adopted. This reasoning explains the differing methodologies in the three NRAs and why those differences have produced alternate conclusions. As an example, Mr Strachan highlighted the fact that the Applicant's NRA had drawn on a range of expertise and experience including input of the Harbour Master Humber (with his wealth of experience in relation to vessels and the challenges of navigation on the Humber), as well as the Dock Master, the Humber pilots and the Stena Masters who operate into both the Inner Dock and the Port of Killingholme. This composite picture has formed the Applicant's NRA and informs the conclusions about the ability to operate the potential new development safely subject to a raft of controls. All of this is of critical importance in producing a robust NRA. Mr Strachan KC stated that although there are differing views on tolerability and ALARP, there is consensus between the three submitted NRAs on the identification of the relevant risks. Instead, the difference in view is whether or not, with the wealth of experience which has inputted into the Applicant's NRA, these identified risks can be managed. Mr Strachan KC noted that it was unfortunate that DFDS and IOT Operators disagree with the conclusions of the Harbour Master Humber who has been involved with the NRA and simulations throughout. It should also be noted that the IPs' criticisms have unfairly included criticism of the authors of the Applicant's NRA, who have

		discharged their duties diligently, taking into account contrasting sets of views. Mr Strachan underlined that there is a bigger picture here, in that the Applicant's NRA recognises that not everyone will agree, and these differences of view have been considered. In this difference of judgements, however, there is an overarching point that the SHA is required to operate the harbour safety for all vessel traffic. The Harbour Master must do the same, applying operational controls if necessary at any particular time as well as making assessments of the inter-relationship between infrastructure and issues of safety. Having highlighted that the Applicant's submissions have demonstrated a number of problems with IOT Operators' and DFDS' NRAs, Mr Strachan stated that the criticism of the NRA processes and independence of authorities is completely misplaced. The Applicant operates the Port and is absolutely invested in the Port's safe operation, with nothing to gain from anything to the contrary. The Harbour Master for this port, and all Harbour Masters across the country who have a similar relationship with the Port operator, have no other interest besides the safe operation of the Port for which they are responsible. Mr Strachan then turned to the point raised by the IPs regarding the independence of the Harbour Master, stating that it lacks the basic appreciation that these authorities are taking their legal responsibility very seriously; and can be challenged on their decisions using Public law principles. Mr Strachan stated that none of this is pertinent to the NRA in front of the ExA, which is a careful examination and judgement

		of the vested in an appropriate authority which has, at its core, an obligation, duty and incentive to operate in a safe fashion. The criticisms being made had lost sight of the basic principle that the Applicant, like the Harbour Master, has safety at its core and has no reason to operate or promote a facility that was unsafe.
17.	The ExA asked the Applicant about the conditions simulated in Run 1 of the simulations undertaken by the Applicant.	Mr Mike Parr, on behalf of the Applicant, stated that Run 1 was simulated at HR Wallingford on 7 November and showed a Stena Transit Class Vessel approach IERRT Berth 3. Mr Parr explained that the wind was set between 15 and 20 knots (a mean wind of 17.5 knots) and that the vessel was set up in the main part of the river with the flows vectored to set down toward the IERRT, as previously requested by DFDS. Once the vessel was level with the IOT berthing line, the vectored tide was removed and the vessel made a sternward approach to IOT Berth 3 using the HR Wallingford Peak Spring ebb model tide, which are tides that would occur once or twice every 28 days in the Humber. Mr Parr stated that this showed that in the strongest ebb flows which can be expected in the Humber, as well as in the strongest wind conditions that might be expected once or twice a month, the Stena Transit Class can approach IERRT Berth 3 (with 4 tugs on the tug pontoon at the end of the Eastern Jetty) and perform the manoeuvre safely without recourse to any tug support.
18.	The ExA asked the Applicant what would happen if there were a vessel on Berth 2.	Mr Mike Parr, on behalf of the Applicant, clarified that there was meant to be a vessel on Berth 2 for Run 1 but during the setup phase it was missed. He added that there had been a discussion about whether a re-run should be conducted but it was decided as long as additional

		runs could be done with the vessel on Berth 2, then they could understand whether a re-run was necessary. Following this, there was no suggestion that a re-run was required. Mr Parr explained that a similar manoeuvre was re-run with a wind increase to between 25 and 30 knots. This wind speed occurs several times per year on the Humber. With a vessel on Berth 2, the vessel was able to manoeuvre to Berth 3 with tug assistance if required in those conditions.
19.	The ExA asked the Applicant what would change with respect to towage if the tested vessel was larger.	Mr Parr stated that the Jinling, a larger vessel, was run in much stronger conditions. The Jingling was used to establish whether a vessel of that size can be operated with all the appropriate controls in place from the Berth as designed. At a wind speed between 25 and 30 knots, the Jinling class was able to manoeuvre to Berth 2 and 3 without tug support on most occasions.
20.	The ExA asked the Applicant whether the Jinling vessel class would be likely to operate at this development.	Mr Mike Parr, on behalf of the Applicant confirmed that he does not believe that it would. The types of vessels using the berths would be a commercial decision for the future operator.
21.	The ExA asked the Applicant why the design vessel has not been modelled to see if the layout of Berth 2 and 3 is capable of being berthed safely.	Mr Mike Parr, on behalf of the Applicant, explained that the aim when conducting simulations is to reduce the number of assumptions being made. Although the design vessel is significantly bigger than a Stena Transporter Class vessel, it is of a similar size in terms of its length and beam to the Jinling Class. He added that the vessel which may be operated by Stena from these Berths does not yet exist or has not been selected by the operator. For simulation purposes it is better to use an existing vessel which has been verified against trial data and using the experience of Masters or Pilots who have manoeuvred the vessel. This

		ensures that the lessons from simulation are reasonable. Furthermore, using a vessel that doesn't yet exist leaves room for criticism that the vessel has been made more/less powerful or manoeuvrable for simulation purposes. By using a familiar vessel model it minimises the number of any assumptions on the model as to vessel capabilities. Mr Parr added that the model provides the Applicant with confidence in their engineering design by adding conservatism in other ways. For example, Jinling class vessels were modelled in relatively extreme wind conditions. The wind speeds used in the simulations were such that, in reality, the Pilots would likely wait for conditions to change before they carry out the manoeuvre. Nonetheless, although the simulation did not necessarily reflect real world practice, it helped to provide the Applicant with confidence that the Berth is broadly appropriate for a design vessel of 240m by 35m in width. Mr Parr highlighted that simulations can help both the operator and the Applicant decide what vessel to charter for the development and to determine the parameters for a manufacturer when designing a larger vessel which is to operate at the IERRT. Mr Parr stated that, as far as he is aware, in the immediate future Stena only intend to operate a Transit Class vessel from IERRT, which has been simulated extensively. This was done to test the type of controls which will be appropriate for IERRT immediately following construction.
22.	The ExA invited the Applicant to explain the conditions and parameters of Run 10 and what they expected to learn from this simulation.	Mr Mike Parr, on behalf of the Applicant, explained that he briefed the setup for the run with the Harbour Master present. The Harbour Master subsequently briefed the PECs on what he considered the optimum manoeuvring strategy. After the run was executed, there was a debrief

		session attended by the Applicant, the Harbour Master, Stena PECs, DFDS and IOT. Run 10 was part of a series of runs where there was an onshore wind which was increased to between 25 and 30 knots (mean wind of 27.5 knots). This was run with the peak spring ebb tide. Mr Parr explained that lessons which had been identified in the normal operating conditions could be broadly applied to stronger wind conditions. In those stronger wind conditions, the aim was to see how much power the vessel required to operate and how much tug power was required to support it. Both Mr Parr and the Harbour Master Humber explained that although the tug appears close to Berth 2, this tug was centrally controlled by a simulator operator who did not have the visual references expected, rather than a tug operator from the Humber. Mr Parr stated that the relative position of the tug to the infrastructure was discussed in the debrief and it was accepted that a manned tug would have made more appropriate and timely adjustments.
23.	The ExA invited the Applicant to consider what may have been seen if the run had been done with a Jinling sized vessel with wind sheltering effects.	Mr Mike Parr, on behalf of the Applicant, emphasised that HR Wallingford's position is that for these types of simulations it is better to demonstrate the ability for vessels to operate without sheltering. This is because it gives a more conservative assessment of how much lift and power is required to safely operate the vessel. He added that the run does not then have to be repeated with sheltering. Sheltering is useful in the simulations when training Pilots as they need to get used to anticipating the effect the variation in wind has as they manoeuvre into the lee side of a vessel.

		Mr Parr added that in previous runs sheltering has been applied, with the sheltering algorithm upgraded to support some of the assessment which was requested by IOT's maritime advisors. In Run 10 there was no significant reduction to the vessel's capability to safely complete the manoeuvre compared to similar runs where sheltering was not applied.
24.	The ExA asked for clarification from the Applicant as to whether this is a departure, so the sheltering effect will be diminishing as the vessel leaves its berth.	Mr Mike Parr, on behalf of the Applicant, explained that this is correct and that the danger is if the Pilot had not correctly anticipated the effect of the increasing wind as he came clear out of the lee of the adjacent vessel, his bow might set down toward the tug pontoon or the Eastern Jetty.
25.	The ExA invited the Application to respond to representations from DFDS that the Delphine Vessel class was closer to the design vessel and therefore more appropriate for the simulations.	Mr Mike Parr, on behalf of the Applicant, disagreed with the suggestion that it is easy to modify ship models – stating that this was not at all the case. He explained that to create a realistic and effective ship model, you need accurate drawings of the vessel as well as an understanding of the vessel's propulsion plant, rudder and bow thrusters and the shape of the ship. He added that you would also need to know more general information including the mooring points are so you can understand where tugs can be attached, etc. It is not straightforward for any ship model to be easily inserted into a simulation. Mr Parr cited the example of the CLdN G9 Class (Delphine), which HR Wallingford does have a model of. It is a single engine with single CPP propeller that delivers 21,060 KW output. He compared it to the Jinling class which has twin propellers and delivers 23,600KW output. It is quite feasible in due course, that one can have a larger vessel with twin propellers delivering more power than would be demonstrated by running the G9 (Delphine).

		Mr Parr added that there are other design options as the G9 (Delphine) has a bow thruster and a stern thruster both delivering more than 60 tonnes whereas the Jinling only has a 65 tonne stern thruster. The two vessels also have different restrictions in terms of applying tugs. Mr Parr explained that when a client asks for support on a design problem, HR Wallingford provides advice and suggests an appropriate vessel to be used in a simulation; as was done here for the Applicant. HR Wallingford is confident that the Jinling class used is the appropriate design vessel to demonstrate the space available is appropriate for safe navigation in and out of the infrastructure. If the Applicant provides details of a larger vessel in the future, more discrete advice can be provided with the support of simulations. It is not a straightforward process simply to pull out a design vessel and its characteristics from thin air or to adapt the characteristics of another vessel in order to fulfil a design specification which is just based on length, beam and depth.
26.	The ExA asked the Applicant whether anything valuable could be learnt from the G9 (Delphine) which would have allayed some of the stakeholder concerns.	Mr Mike Parr, on behalf of the Applicant, explained that HR Wallingford undertook an internal sensitivity test on the G9 (Delphine) when selecting the vessels. The Master Mariner found that it was more sensitive to use the Jinling class so that the Applicant was provided with a more conservative model than would have been done if the G9 (Delphine) was used. Mr Parr agreed with DFDS that the number of assumptions on a vessel model should be kept to a minimum. On the design constraints they were given, it was appropriate to select a design vessel which is similar to a modern Ro-Ro vessel with twin shaft propulsion and two rudders.

		Mr Parr then differentiated from DFDS by stating it is not always appropriate just to change the size and dimensions of the vessels and assume the handling characteristics will be the same, especially when there is no trial data to support that. Mr Parr stated that the Jinling vessel, which was used for feasibility, exactly as suggested by DFDS, to enable a judgement that the space available, navigational geometry and location of IERRT relative to the flows in the area was entirely appropriate for the testing of safe navigation.
27.	The ExA asked the Applicant whether there has been time for the Applicant to review the recent simulations.	Captain Mike McCartain, on behalf of the Applicant, confirmed that he has reviewed the simulations
28.	The ExA asked the Applicant whether the risk of an allision at the Eastern was now possible or unlikely.	Mr James Hannon, for the Applicant, agreed to come back on this by the end of day. **Post-Hearing Submission** A response to this question has been provided at 64 below.
29.	The ExA asked the Applicant whether it matters that the design vessel will not operate from the Port until the design has been tested.	Captain Mike McCartain, on behalf of the Applicant, provided the example of the Applicant's other Ports where similar issues are often faced. He stated that cruise ships over the last 10 to 15 years have grown considerably and the changes that come with this pose the same challenges in terms of size, under keel clearance, power and effect of wind. When these cruise ships are to start coming into the Applicant's Southampton Port, a number of processes are undertaken to simulate and understand any operational constraints there may be, and how operations can be adjusted to conduct pilotage and navigation safely with their Pilots and tugs etc.

		This case is no different as one has to go through this process on a case-by-case basis. On the Humber, at any one moment, there is many decades of experience amongst the Harbour Master and his team which they apply within known parameters and what is in the simulator to make operational decisions regarding constraints and controls around the parameters they see. It is not unusual for this to happen when introducing new ships – it is similar to larger aircraft when they first come into airports.
30.	The ExA asked the Applicant whether the new vessel scenario at other ports presented above concerns situations where the infrastructure was built to accommodate such vessels or if it already existed and new ships were coming to port.	Captain Mike McCartain, on behalf of the Applicant, explained that in the example provided, some infrastructure had to be adapted particularly regarding the cruise terminal such as where some of the air bridges were placed to accommodate these new ships and to consider what to do with the new bollard arrangements. Captain McCartain explained that this is not uncommon where larger and more powerful vessels are introduced to a port. These vessels need to be reviewed to determine what controls need to be in place and for the mariners to understand how they can operate. Mr Strachan, on behalf of the Applicant, returned to an earlier point about the Rochdale envelope, which is concerned with assessing limits subject to the principal of further restrictions or consents being required. In order to operate a larger ship, the regulatory controls already described by the Harbour Master would apply in assessing what is being proposed in terms of vessel design, propulsion etc. The suggestion that there has not been a compliance with assessment for those purposes is wrong.

		Mr Strachan stated that, by contrast, the spatial ability to construct a berth that is capable of accommodating a vessel of a certain length has been assessed because that has an immediate effect on the dredging for the length of the pontoon. The actual operation of any future ship is controlled by a simulation and approvals process. An example of this is Green Port Hull where there is the precise situation where the berth is already there but is not designed for the increase in the wind turbine blade length that is now being proposed. The operator for Green Port Hull now wants to come in with a wider berth because the demand for a larger blade has arisen and it has to be assessed. Another example is the Jinling class at the Outer Harbour of Immingham. The Outer Harbour was promoted by the Applicant, (and, as an aside, the consent was challenged by CLdN) and is operated by DFDS under a tenancy arrangement. DFDS then wanted to bring in larger vessels which had to be simulated and accepted by the Harbour Master among others. The arrangements for IERRT are exactly the same, but are being criticised for lacking independence. If in the future Stena were to come forward, in the same way DFDS did, to run a larger ship as circumstances change, all of the regulatory controls will apply without any proper basis for criticising independence or the care and diligence of those who are entrusted with the task. Mr Strachan emphasised that the Applicant would not want a vessel to operate anywhere within the Port unless it can be operated safely. This will similarly be the case for the Harbour Master and Dock Master as they are operating under their own statutory duties. Whether you take a cruise ship example or the Immingham example, the principles are the same. He explained that this process is similar in many pieces of

		infrastructure. For example, this would happen with an aircraft which can be physically accommodated on a runway but cannot operate because of a noise or safety regime. The overall point is that for controls to operate the way they do, the infrastructure might be capable of physical accommodation, but it does not mean it will happen without the necessary regulatory regimes making an assessment.
31.	The ExA asked the Applicant what implications there might be for the development if the view was taken by the Secretary of State to impose an operating limit based on vessel size.	Mr James Strachan, on behalf of the Applicant, questioned whether it is necessary or appropriate for a restriction on vessel size to be imposed in a DCO in circumstances where there is already a regulatory regime which applies here as it does to other ports. It is not clear why the Secretary of State would impose a restriction when the regulatory regime requires the Harbour Master to be satisfied that a vessel can operate safely before it is operated. If the Secretary of State were required to impose a condition, then that procedural mechanism which must be gone through is a change to the requirement that the Statutory Harbour Authority and Harbour Master are required to approve a safe operation based on modelling. Mr Strachan observed that the restrictions being spoken about are relating to particular conditions at which operations may or may not be subject to, such as extra tugs or potential timing restrictions. The simulation is not showing some general proposition that one can't operate a vessel of a certain type like the Jinling even with tugs. Mr Strachan explained to the ExA that Mr Elvin for IOT is wrong on EIA Law and the '*Hardy*' case (to which he had referred) and its applicability here. He concluded that the approach which has been taken here is prudent and safe. He emphasised that the Harbour Master, Humber

		and the Statutory Harbour Authority will have to be satisfied that a larger vessel when proposed can be operated safely.
32.	The ExA asked the IOT Operators and the Applicant as to what they thought the scheme was that formed the basis of the letter dated 28 September [AS-020] and subsequent discussions, specifically in relation to changes to the finger pier.	Mr Elvin, on behalf of IOT, stated that the original position was that IOT and the Applicant had agreed to impact protection measures based on the Beckett Rankine Scheme, albeit with some minor refinements. However, the position we have reached is that that is no longer feasible. Mr Strachan, on behalf of the Applicant, made clear that the exact length of the finger pier extension was not known as being a requirement. He referred to [AS-027] as setting out the Applicant's understanding of the 28 September letter. Mr Ben Hodgkin, on behalf of the Applicant, highlighted that the high-level sketch appended to the 28 September letter indicated an extension to the finger pier which resulted in a pier approximately 240m in length. It became clear after speaking with IOT and their design consultants that an overall length extension of 100m was required, taking the overall length up to approximately 300m. This is a 25% increase on what was shown in the Beckett Rankine sketch. Cdr Paul Bristowe, on behalf of the Applicant, explained in response to IOT, that there were a number of conversations running in the background without prejudice. On top of this there was a Beckett Rankine scheme, introduced separately.
33.	The ExA invited the Applicant to explain the assessment of risk during the construction phase as opposed to the operational phase and the most likely	Mr James Hannon, on behalf of the Applicant, explained that this had been considered within the NRA in the risk tables. He highlighted that the risk has been assessed as acceptable and that the nature of a construction vessel is very different from a Ro-Ro as they are lighter. Because of this, the consequences are not as severe as they would be

	consequences of the loss of power in regard to a construction vessel.	in the case of a Ro-Ro vessel. Although the risk of loss of power is possible the outcome is relatively minor. Mr Ben Hodgkin, on behalf of the Applicant, explained that the vast majority of construction vessels that will be in the area will typically be Jack-Up barges which will be stationary and fixed to the river bed when they do their work. When they do need to be moved, they will be assisted by either a tug or multi-craft vessel in a very discrete movement which can be timed appropriately and can be covered during normal construction operational procedure. Cdr Paul Bristowe, on behalf of the Applicant, stated that as recently as the beginning of this year, a maintenance dredge was carried out on a 3km channel at the Grimsby River Terminal facility. At various stages there were two Backhoe dredgers with spud legs which were being manoeuvred by two tugs as well as up to four split barges being manoeuvred by up to 3 tugs taking the spoils out to the dredge ground.
34.	The ExA asked the Applicant to clarify whether an anchor drop was a viable control for a construction vessel.	Mr James Hannon, on behalf of the Applicant, said yes, depending on the type of vessel it is. In the example of a spud legged barge, then there is the ability to put the legs down to stop the vessel drifting any further.
35.	The ExA asked the Applicant whether they are able to provide details on the simulations carried out in November 2022 where the anchor drop of a Ro-Ro vessel was simulated.	Mr Mike Parr, on behalf of the Applicant, explained there was a 20 second pause put in place from when the engines were effectively stopped in the simulation before the anchor was let go. He highlighted that this was agreed at the time of simulation based on the input of all the mariners present. Mr Parr agreed with DFDS that is very difficult to be precise, so a reasonable time needs to be selected. 20 seconds was agreed to be reasonable at the time. In this case, the

		vessel was stopped within 100m with both wind and tide setting toward the IOT, showing anchor drop to be effective as a precaution.
36.	The ExA asked the Applicant how the above 100m arrest distance was then subsequently assessed and considered in terms of whether this risk was acceptable.	Mr James Hannon, on behalf of the Applicant, clarified that it did not fundamentally change the outcome as the vessels were seen to be adequately arrested so looking at the risk assessment and the way it was assessed, and the information from the simulations, it did not didn't change the outcome.
37.	The ExA invited the Applicant to consider what would change to the assessment if the reaction time were 40 seconds and the arrest distance were 200m.	Mr Mike Parr, on behalf of the Applicant, explained that although the changes can be made to the assessment, it depends where the breakdown occurred. The closer you get to the infrastructure, the less time there is for a response but also there is a shorter time window in which a breakdown can take place. There were extensive conversations amongst the simulation team about whether it was viable that there would be a two engine breakdown on this type of vessel with the redundancy and the setup of the engine. Mr Parr stated that in terms of risk assessment he would expect a consideration of (i) whether both engines can breakdown at the same time (and the chances of that happening), (ii) if that does happen, whether it is reasonable for the anchors to be deployed and in what sort of time, and then (iii) where is 100m from the anchor deployed position.
38.	The ExA invited to Applicant to consider whether the additional stakeholder engagement should lead to a re-assessment of risk.	Mr James Hannon, on behalf of the Applicant, stated that risk was adequately covered in the final HAZID workshop and that the engagement was undertaken with enough inputs to produce a comprehensive risk assessment. By the final HAZID workshop, there was also enough information from the navigation simulations.

		Mr Hannon confirmed that the risk assessment was robust enough to deal with what has been discussed in ISH5 and can remain unchanged.
39.	The ExA invited Stena to provide clarification on their routes and sensitivity to possible delay.	Master Geert Jan Feringa, for Stena Line, explained that Stena Line runs two routes from the Netherlands to the UK. The first is from the Hook of Holland to Killingholme (11 hours) and the second is from Rotterdam to Immingham (11 hours) which is run with chartered vessels. While the Rotterdam route is the same length of time, the charter has often been delayed by 50 minutes in order to reduce emissions. These routes leave in the evening at 20:30 and if they leave an hour late, they can still make it on time by burning more fuel. Any delays are usually due to unforeseen circumstances such as the wind. This would be the same for all operators. On Stena's route from Killingholme, if there is a delay of more than 30 minutes, Stena are under strict instructions to inform CLdN. Delays are more often due to unforeseen circumstances rather than late sailings or late departures. However, he made clear that they are almost always running on time.
40.	The ExA provided an opportunity for the Applicant to respond to allegations made by DFDS that any delays to the service would likely cause congestion.	Cdr Paul Bristowe, on behalf of the Applicant, cited Chapter 5 of the Applicant's NRA where it speaks about the global trend in shipping. The trend, reflected in the Humber, is that vessels are increasing in size with similar tonnages being moved, leading to fewer port calls. There were future projections that showed growth and continuation of such trends. Cdr Bristowe cited a table produced by the Harbour Master which showed that there is capacity in the Humber and the Port of Immingham

		itself in terms of average daily arrivals and those peaks (i.e., the maximums). He reminded the ExA of the pilot operations manager who hosted them on their site visit and showed them the chart of approaches and the various stemming positions. He stated they are aware of indicative timings for manoeuvres from each of those stemming positions either back onto the Immingham Ro-Ro Terminal, onto the Eastern or Western Jetty into the Harbour or from the bell-mouth into the lock. Cdr Bristowe highlighted that this showed that the Applicant knows how long manoeuvres take, where vessels wait and how long it takes for them to get to their destination. Cdr Bristowe addressed the extreme example provided by the Harbour Master of a 30-minute manoeuvre. He stated that it was not a full 30 minutes, instead the vessel owns that space for this period after which it moves out of the way and the next vessel is permitted to carry out its manoeuvre. Commander Bristowe explained that to manage this safely there is a team of 5 in 24/7 watches. Three delivering the Vessel Traffic Service in the Humber Marine Control Centre as well as 2 schedulers in the back office whose job is to manage the movement of all the vessels in the Humber and entering/departing from the Applicant's four ports. There is a robust plan in which the necessary Pilots/PECs are allocated to take those vessels. The highly trained team in the Vessel Traffic Service consists of 2 Vessel Traffic Service Officers and 1 Assistant Harbour Master. The Plan is dynamic with these three individuals in charge of flexing and tweaking the plan to make it safe as well efficient to ensure the smooth running of the commercial Port. This shows understanding of what the

		issues are and that there is a robust means of managing and mitigating those issues as well as spare capacity on the Port for growth. Mr Strachan, on behalf of the Applicant, stated that Paragraph 16 of the Environmental Statement considers congestion and whether there would be an impact on services in light of the controls which would be applied, as described by Cdr Bristowe. He cited examples such as the prioritisation of commercial vessels over construction vessels.
41.	The ExA asked the Applicant to explain the relevance of past simulation data from DFDS.	Mr James Strachan KC, on behalf of the Applicant, explained that the request relates to the topic of congestion and understanding of how the harbour operates. In the context of risk assessment, there had been considerable discussion about DFDS manoeuvres into the outer harbour in close proximity to the Western Jetty. Mr Strachan KC continued that he understood on the last occasion when the point was last raised, the Applicant asked DFDS to provide their simulations. This request was renewed yesterday. As of yet, the Applicant has not been provided with the information. Mr Strachan KC referenced the data put on screen the previous day, and the length of time the Applicant's proposed manoeuvre was in the operative area. He suggested that the same could be done for congestion purposes with reference to AIS data. He explained that the request was made at a previous hearing, which the Applicant would consider material, if it were to be suggested that there is some intolerable risk of manoeuvring in proximity to the Eastern Jetty. The data would show what has been accepted and going on for 5 years in proximity to the Western Jetty. The simulation data would show how the

		manoeuvre was accepted by all parties concerned as a manageable risk, which is relevant context.
42.	The ExA invited the Applicant to clarify how quickly tug operators can expand their fleet.	Cdr Paul Bristowe, on behalf of the Applicant, explained that SMS and Switzer are the two tug operators at Immingham. Both operators move tugs across the UK regularly in response to demand. There is also a charter market, where a tug can be brought in on a short-term or long-term basis. He added that the details of the build option would need to be obtained by the tug operators, but there are several short-term solutions should the market require additional towage.
43.	The ExA asked for an explanation of **[APP-092]** Run 30.	Mr Mike Parr, on behalf of the Applicant, explained that there was no vessel on the IERRT Berth due to an oversight when setting up the simulation run. Despite this, when looking at the track plot it was agreed that there was no need to re-run the simulation as the swept path was not affected by the IERRT vessel. Mr Parr explained that there was 30 knots of wind but that there was confusion amongst stakeholders at the simulation about the limit for onshore wind, which was 30mph. He emphasised that this is considerably less than 30 knots which was what the simulations were run at. After subsequently reviewing the documentation it became clear that 30 knots onshore wind is above and beyond operating conditions for IOT Berth 8 for a tanker of that class. Mr Parr clarified that when he uses the terms onshore and offshore wind, he is referring relative to the Berth. For IOT Berth 9, a south west wind would be classed as an offshore wind.

44.	The ExA asked about the risk assessment which followed on from the Run 30 simulation. In particular, they asked what was considered in terms of impact on IOT operations aside from an allision which has been clearly identified as a hazard.	**Post-Hearing Submission** The Applicant has provided a detailed response to this in response to Action Point 12 from ISH5 below.
45.	The ExA asked the Applicant what swept path analysis was commissioned by the Applicant.	Mr Mike Parr, on behalf of the Applicant, explained that the grey area around the vessel in the simulation shows the swept path of the vessel.
46.	The ExA asked the Applicant about the tidal flow and use of tugs in relation to [APP-092] Run 30.	Mr Mike Parr, on behalf of the Applicant, reiterated that the onshore wind operating limit for this berth is 30mph which is 26 knots. He emphasised that the run is a steady wind of 4 knots above the operating limit. The discussions around the manoeuvre were to understand whether a larger tug than normally used could be attached to try and assist the vessel bow. Shortly after, someone looked at the berth operating manual and said the operating limit was 30mph rather than 30 knots, leading us to reconsider whether this manoeuvre was a necessary focus area. Mr Parr explained that the condition that IOT described, where at the low water flood there was a deviation around the Pontoon, was accommodated by the modelling used in July 2022, and that when considering the existing operating conditions that IOT work to, that feature of the flow was not deemed to have a significant effect on the ability of the vessel to operate to and from that Berth. Mr Parr continued that given their knowledge of the adapted pontoon design HR Wallingford are undertaking a revaluation of the flow model.

		The early indication is that the change around the northern end of the pontoon on the peak flood flow is of the order of 5 degrees additional deviation and 0.2 degrees of a knot speed increase. This change is limited to peak spring flood and only observed in the first hour. Mr Parr explained that they are still working on the modelling to look at what that effect is at lower ranges. The peak spring flood flow is a 1 in 28 day event with those results shared with the Applicant in due course. **Post-hearing submission** Action Point 15 below provides additional information regarding the simulations undertaken in November 2023.
47.	The ExA asked the Applicant about the report produced by HR Wallingford for the Applicant, on the July 2022 simulations.	Mr Mike Parr, on behalf of the Applicant, stated that he did not remember any IP responses to those simulations except that the manoeuvres were successful.
48.	The ExA invited the Applicant to respond to IOT's comments about possible interference with current operations.	Mr Mike Parr, on behalf of the Applicant, explained that the main reason for simulations going to and from IOT Berth 8 was to establish whether there was a navigation strategy which would allow those vessels to arrive and depart within existing operational limits. It was clear from this that there was less space for them to operate in and that a new strategy for some departures had to be developed. The simulations had shown that this was feasible. Mr Parr expanded that there is a change in how this is perceived in the simulator and that the Pilots and PECS would agree with IOT's comments that it looks intimidating and close at first. There was also a comment that this was not dissimilar to other arrivals and departures

		where there was operation in close proximity with other moored vessels, which he stated is a common occurrence. The conclusion of the simulation manoeuvres to and from IOT Berth 8 with IERRT infrastructure and a vessel on IERRT 1 is that, notwithstanding flow changes which is still being investigated, vessels which operate at IOT Berth 8 will still be able to operate in the same conditions as they were able to prior to IERRT infrastructure and with a vessel on IERRT 1.
49.	The ExA asked the Applicant for an insight into discussions that led to a joint letter on 28 September between the Applicant and IOT.	Mr Strachan, on behalf of the Applicant, reiterated that the discussions held were without prejudice and that the Applicant's position remains that further enhancements or changes were not a requirement, consistent with the initial position. Mr Strachan emphasised that the position had not changed and disagreed with the previous letter from IOT that the Applicant's proposed changes were necessary. The purpose of without prejudice discussions is to see if you can reach a common position where both parties are satisfied. Mr Strachan emphasised that the Applicant thought they were getting closer to a common ground prior to the letter dated 28 September but now that is not the case. Cdr Paul Bristowe, on behalf of the Applicant, explained that during the meetings on 27 and 28 September leading to the letter, he had no basis to believe or understand that the Applicant was being asked to provide a circa 100m extension to the IOT jetty. On the contrary, the Applicant believed that it was being asked to provide a detached impact protection barrier which was serve a dual purpose, acting as a berthing face with

		a walkway in between, which is very different from a straight through jetty extension incorporating impact protection of circa 100m. Cdr Bristowe outlined preliminary discussions where two different solutions were considered, one of which was the Beckett Rankine proposal which was the one taken forward. The other scheme was briefly considered, in a basic schematic, which showed a jetty extension and different type of impact protection, but this was not taken forward. The principle of the design was that the jetty remained as it currently is and that there would be a combined berthing face and dolphin with a walkway connecting. As part of these conversations, there was a requirement to demonstrate that IERRT Berths 2 and 3 would withstand vessel impact and that has been covered as well. In the previous hearing, the wrong schematic had gone up on screen and this was quickly corrected to the Beckett Rankine scheme. This showed it was clear to the Applicant that prior to 28 September they were looking at something akin to the Beckett Rankine scheme. After 28 September, several detailed design meetings were held. On 5 October, more details emerged, including the requirement for two longer tankers than the ones currently seen on the finger pier, adding length to any requirements as well as additional mooring requirements which would require more spacing. This made it clear that it was not a walkway being requested but rather an extension. There was a further new request that the impact protection was to be detached from the finger pier which adds a further extension. Cdr Bristowe emphasised that up until 28 September they were looking at the Beckett Rankine design, but after these new

		requirements were added by IOT it was clear that they wanted a departure from this. Mr Ben Hodgkin, on behalf of the Applicant, stated that he is head of projects at ABP and has a background in marine civil engineering. He attended every conversation between the Applicant and IOT Operators after 28 September. In these meetings both sides were working in an open and collaborative way to convert a high-level schematic into something which is deliverable and meets the requirements of IOT. This was done through 4 workshops in the first weeks of October. The IOT operators introduced new requirements which were not consistent with the high level schematic that was included in the letter of 28 September. There was a conflict between what was being requested, what was being presented, and what could viably be delivered. Aside from length, there are a number of other fundamental issues which became apparent. The requirement that was stipulated was for any vessel impact protection structure to be designed for a maximum impact speed of 4.5 knots for the maximum design vessel envelope. From an engineering perspective, the size of structure that is required to resist and absorb the energy of a Ro-Ro vessel travelling at that speed resulted in a footprint that could only be provided with the construction of a solid Caisson or sheet piled wall structure. It was clear from the design work done in the intensive two-week period that to accommodate IOT's requirements, one would need a solid structure (not piles) and each would need to be approximately 45 x 25m.

		This was 4x larger than the original schematic shown on the Beckett Rankine sketch. Mr Hodgkin emphasised the impact on deliverability where you were introducing large structures in an already constrained environment. A key consideration for the Applicant was the environmental impact of a structure of that size and scale which led to a direct subtidal loss that was 10x more than the total subtidal loss of the whole IERRT development. This would constitute a material change to the Environmental Assessment. This was before considering the impact on hydrology and the impact that this would have on the continuing operation of the IOT infrastructure. There were several reasons why the scheme responding to IOT's requirements was completely disproportionate and undeliverable when compared to the existing controls and proposed operational controls. This is strengthened by the fact that independent advice and the decision from the HASB has been that this protection would not be necessary in any event. Mr Hodgkin expressed disappointment that common ground had not yet been reached. He explained the work the Applicant has undertaken to add granularity to the proposed operational controls and the discussions which have taken place during October on them with IOT.
50.	The ExA invited the Applicant to consider whether there is any possibility within the examination period of reaching common ground with IOT.	Mr Ben Hodgkin, on behalf of the Applicant, explained the Applicant's position as clearly set out within the Change Notification. The current position is that to meet the specified engineering requirements it would not be viable to deliver the physical infrastructure that was suggested as part of the design that was developed from the

		Beckett Rankine scheme. The development/requirements put forward by IOT effectively assume that there will be no or limited operational controls in place. The requirement to design impact protection structures for vessel speeds of 4.5 knots would suggest that it is trying to protect against an event where there is no tug attached and the vessel gets up to a speed which only occurs several times a year. The ExA noted that the design premise for the impact protection is one that is very unlikely to occur.
51.	The ExA asked the Applicant how long it would take for a stationary vessel which loses power to get up to 4.5 knots.	Mr Ben Hodgkin, on behalf of the Applicant, outlined the operational controls being proposed for Berth 1. Simulations were carried out following discussions with IOT in order to demonstrate that 4.5 knots is not an appropriate level for the impact protection measures. The simulations showed that the operational controls that are going to be put forward are above and beyond what would usually be applied for a facility of this type on the Humber. Mr Hodgkin stated that tugs have been demonstrated to stop and arrest the vessel proposed for use at the IERRT. He described the proposal for Berth 1, which has been developed and shared with IOT in outline. He provided an example of this in that on an ebb arrival, where one has a current speed of less than 2.5 knots, in standard operating conditions there would typically be no tug. He emphasised that the enhanced operational controls means a tug for all ebb arrivals to Berth 1. He continued that the Applicant's proposal is to commit to providing a tug in that instance as an extra layer of control. Mr Hodgkin added that this was fully consistent with the Applicant's NRA.

52.	The ExA allowed the Applicant to respond to DFDS's comment about operational measures in the DCO.	Mr Strachan, on behalf of the Applicant, explained that they are happy to outline the details of the operational measures. Mr Strachan emphasised that this had been made clear in the Change Request. He added that operational controls are a common feature in the Humber. He stated that what is being said is not intended to detract from the principal case that it remains a feature of navigation on the Humber, that come what may regardless of the DCO, the Harbour Master has power to impose operational controls in addition to those already standing in instruction. The Applicant is dealing with the principal of an operational measure that goes beyond what the Harbour Master himself requires in order to provide potential comfort. This should be unproblematic from the Harbour Master's perspective, as anything that mitigates risk further is beneficial. The Harbour Master supported this by explaining that their hands are not to be bound in any way. The operational control must be a minimum control, in order that the Harbour Master is free to add additional controls in the future.
53.	The ExA invited the Applicant to provide an update on discussions with IOT Operators.	Mr Strachan, on behalf of the Applicant, stated that two things have emerged from their discussions. Firstly, with respect to the without prejudice discussions since 28 September, the Applicant and IOT are both content for these to go in front of examination. Secondly, with respect to the principle of operational controls, there have been further discussions. The IOT will not accept that operational controls address their position, so it is unlikely that there will be agreement. However, the Applicant and the IOT Operators will continue to engage about the

		operational controls. Mr Strachan also added that the Applicant is happy to engage on this basis with DFDS too. Ms Victoria Hutton, for the Harbour Master, reiterated that the Harbour Master's position remains that it is not necessary for the DCO to stipulate operational controls as they are subject to a separate statutory regime and this is an established process that has been used for years to manage safety in the Humber.
54.	The ExA asked the Applicant if section 145(2) of the Planning Act 2008 requires that the Harbour Master's consent would be required if the DCO were to override the power of the Harbour Master.	Mr Strachan, on behalf of the Applicant, stated that section 145(2) supports Ms Victoria Hutton's submissions for the Harbour Master. Mr Strachan is not aware of a Harbour Revision Order that has included provisions for operational controls because section 145(2) exists to stop this from being necessary.
55.	The ExA invited Mr Ben Hodgkin to continue his evidence for the Applicant.	Mr Ben Hodgkin, on behalf of the Applicant, stated that following the conclusion of the various design workshops with IOT, it became clear that a solution that met their needs from a physical infrastructure perspective was not deliverable. However, the Applicant maintained that they were keen to explore the opportunity of including enhanced operational controls and agreeing this with the IOT Operators. The Port of Immingham developed an initial proposal of what these enhanced operational measures would look like, and these were shared with IOT on 4 November, in advance of a meeting with them on 9 November. This meeting was attended by IOT and ABP and set out the basis for the proposed controls. On 10 November, the Applicant received a response from IOT which stated that they were content to proceed with discussions for procedural controls. This response requested additional information, including a

		set of proposals for simulations to be undertaken to demonstrate the effectiveness of the enhanced control measures. The Applicant contacted HR Wallingford on 10 November and secured simulations for 15 and 17 November, and arranged a meeting with IOT Operators on 13 November as a preparatory call for that set of simulation runs. The intention of the 13 November meeting was to run IOT Operators through the principles that would be simulated on 15 and 17 November, and it served to ensure that the simulations captured the principal requirements of the IOT Operators with respect to what those simulations consisted. IOT confirmed on 13 November that they were not able to attend the meeting themselves due to resourcing and time pressures. The Applicant decided to hold these simulations regardless with attendance from the Harbour Master. Mr Mike Parr, on behalf of the Applicant, confirmed that HR Wallingford conducted the simulations on 15 November. Mr Parr stated that the details of these simulations are being processed, but in brief the simulations showed that based on a design for impact protection that is proposed to go at the end of the IOT, the change in geometry as a result of this design change makes no significant effect to the approaches and departures of IOT 8. The simulations also looked at operational controls for the Stena Transit class vessel, particularly considering whether a single tug would be sufficient to prevent a vessel which had undergone a total control failure whilst travelling at 2 knots astern as it entered the dredge box from being set onto the IOT by a combination of tide and wind. This

		demonstrated that the Stena transit class could be stopped by one single ASD tug from colliding with the IOT infrastructure. Mr Parr added that similar tests in different environmental conditions were carried out with the vessels travelling at 1 knot astern, approximately 1 ship length further from the point of which the vessel crossed in the dredged area. A similar conclusion was drawn here for sensitivity. A sensitivity test was carried out with a change in wind to come from the southwest at 35-40 knots, and a single tug was effective at stopping a vessel from IERRT berth 1 that was subject to a complete control failure from colliding with IOT infrastructure. **Post-hearing submission** Detail of these simulations are provided in response to Action Point 15 below. The two reports were submitted into the examination alongside the Change Request at [AS-071].
56.	The ExA invited the Applicant to respond to DFDS's query as to whether the G9 vessel has undergone sensitivity modelling previously.	Mr Mike Parr, on behalf of the Applicant, first stated that the displacement of the vessel that had been modelled was around 45,000 tonnes. Mr Parr added that the sensitivity modelling for the G9 was an internal sensitivity test which was not recorded. Instead, it was run on the basis of making sure that HR Wallingford recommendations were suitably conservative.
57.	The ExA asked the Applicant if there is any good reason as to why the ExA should not	Mr Mike Parr, on behalf of the Applicant, stated that there is no reason that he is aware of.

	see any simulations other than those which were appended to the ES.	
58.	The ExA asked the Applicant to give an indication of how long the report on the additional simulations might take to prepare.	Mr Mike Parr, on behalf of the Applicant, stated that he has not had an update from his team in the last 24 hours and therefore is not in a position to make promises. However, he will ensure that certain relevant parts are submitted for deadline 7 as a minimum and share these with the interested parties as soon as possible. **Post-hearing submission** This was submitted to the examination as part of the Change Request on 29 November 2023 and can be found at [AS-071].
59.	The ExA asked for clarification from the Applicant as to whether it remains that the simulations for the original 4 berth scheme remained sufficient.	Mr Mike Parr, on behalf of the Applicant, confirmed this. The original four berth scheme had more challenging manoeuvres compared with the new scheme described in the Feb 2023 DCO application.
60.	The ExA asked whether the Applicant wishes to respond to any of the DFDS Deadline 6 responses orally, rather than in writing. DFDS added that it is not clear if the impact protection only withstands a single allision (e.g. if it is sacrificial) and what is proposed after an allision. DFDS also asked what would trigger the decision by the SHA that impact protection measures are required.	Mr Strachan, on behalf of the Applicant, stated that the Applicant will be responding to the Deadline 6 responses in writing. However, it would be good to provide any responses that the ExA requires oral clarification of and invited further questions from the ExA on this basis.

61.	The ExA asked for clarification with respect to whether the impact protection is 'sacrificial' as described by the ES.	Mr Ben Hodgkin, on behalf of the Applicant, stated that whether the impact protection measures are sacrificial depends on the speed of the impact. At its maximum impact speed the structure has been designed to permanently deflect. Therefore, in the event of an impact at the maximum designed energy there would be a permanent impact to the structure, and it would require either maintenance or rebuilding. Mr Hodgkin stated that in the design basis statement that has been shared with the IOT Operations a range of design vessels have been assumed. With respect to a Stena t-class, the equivalent impact speed is 2.5 knots and the equivalent for the future design vessel envelope is 1.8 knots.
62.	The ExA asked the Applicant to provide a timescale on when it expects to submit a changes application.	Mr James Strachan KC, on behalf of the Applicant, stated that this is expected in the middle of next week. He added that the Applicant is currently reviewing the received consultation responses. Mr Strachan KC added that the HASBoard is scheduled to meet on Tuesday, and they will be needed to approve any change request before it is submitted. Mr Strachan KC stated that the Applicant is conscious of the revisions to the NRA as suggested by the ExA for the purposes of a review of the HASBoard. He confirmed that this will be a separate process. **Post-hearing submission** The change request was submitted on Wednesday 29 November, and accepted by the ExA on Wednesday 6 December **[PD-021]**.

63.	The ExA invited the Applicant to respond to IOT's submission that the ES Addendum noted that there is a need to undertake stakeholder engagement to determine navigational aspects of the Environmental Assessment.	Mr Strachan, on behalf of the Applicant, stated that there has been an effort to include IOT in the simulations for the additional simulation controls and this process will continue. Mr Strachan clarified that Mr Parr can engage with the parties present on the simulations that have been carried out, and he will continue to engage as appropriate.
64.	The ExA invited Mr James Hannon from the Applicant to provide a response to a question from yesterday regarding the risk of an allision with the Eastern Jetty.	Mr Hannon, on behalf of the Applicant, stated that the simulations demonstrated that the manoeuvres can be performed safely and there was no change in the risk of allision with the infrastructure. None of the simulation runs undertaken demonstrated a risk of the vessel setting down on the jetty in light of the controls that are already contained within the NRA. Mr Hannon confirmed that the risk remained tolerable and ALARP.
65.	The ExA invited the Applicant to provide any final comments on navigation.	Mr Strachan , on behalf of the Applicant, reiterated that the Applicant has assessed navigational safety with respect to the IOT, and conducted detailed assessment of this risk with the involvement of stakeholders. Mr Strachan emphasised that the additional measures serve to give greater comfort to the IOT Operators and are not required to achieve tolerability or ALARP.
Agenda Item 3 – Transport		
66.	The ExA asked the Applicant what assumptions have been made on inshore transportation terms with respect to what happens to the parts of Immingham's inner	Mr Simon Tucker, on behalf of the Applicant, stated that the position in the transport assessment was that Stena's present usage of Killingholme and the inner dock is generating traffic on the network and forms part of the base survey flows.

	dock that have been vacated by Stena and with the vacation of facilities at Killingholme.	In the assessment, this was not removed from the baseline in terms of assessing the traffic generation of the development. Therefore, the baseline flows adopted in the TA already factor traffic generated at present by Stena.
67.	The ExA questioned the Applicant as to whether the demand would reduce by 33% given that the existing facilities would be used by someone else.	Mr Tucker, on behalf of the Applicant, stated that in reality Stena would relocate over a period of time and grow if the DCO is granted. The assessment is robust as it assumes full operation at Day One. Mr Tucker accepted that the current areas of the Port could be used for something else, and if they were re-used for Ro-Ro vessels then there would be no net change.
68.	The ExA asked the Applicant whether there is enough yard space and/or hours in the day to handle up to three arrivals and departures per day at the proposed development.	Mr Simon Tucker, on behalf of the Applicant, stated that the statement of common ground on dwell times sets out the different respective views of parties. CLdN say that the current import dwell time for Stena at Killingholme is 0.93 days in comparison to a current export dwell time of 0.32. At DFDS, the most comparable service is the Rotterdam service, which has a current import dwell time of 1.5 days and a current export dwell time of 0.52. The Stena data from Immingham indicates a current import dwell time of 2.33 days and a current export dwell time of 0.33. Mr Tucker added that the Applicant's assessment has adopted an import dwell time of 2.45 days and an export dwell time of 0.35 days, which is set out at **[REP5-032].** In that document, at Appendix 4, there is an assessment prepared by the Applicant and Stena which sets out how dwell times are used to derive terminal throughput.

		Mr Tucker explained that the model considers the number of trailer bays identified as available for inbound (import) movements and calculates a maximum capacity for these slots. This capacity is then multiplied by the dwell time of 2.45 days and gives a storage capacity figure. Within this, there is an allowance of ground slots for other type of vehicles (including trade vehicles and containers). For outbound (export) movements, the assessment indicates that there are 228 slots available. Those slots are required for unaccompanied units only (the accompanied units are held in the loading lanes on arrival) and have a much shorter dwell time. These slots are taken up by units that are principally delivered on the day of departure of the vessels. This area builds up in usage and is then discharged when the vessel is loaded. Mr Tucker added that he had two further points. Firstly, there are areas within the terminal facility which are not currently dedicated as slots on current drawings but could be available for use if there were peak requirement for such. The model in Appendix 4 also considers the 'practical terminal capacity' of 528,000, which does not factor in additional measures that can be implemented in the terminal to further boost capacity (such as additional slots or block stowage of units) Mr Tucker noted that DFDS has presented a model which looks at inbound (import) movements only on an hourly basis. The Applicant has discussed this with DFDS but is of the view that DFDS's approach is flawed. The key issues are that, in terms of throughput, DFDS has assumed a peak throughput of 1,800, but there is a minimum throughput of 1,440 units per day. The DFDS assessment should actually adopt a minimum of 1,100 units, as the figure of 1,440 is an

		average day. DFDS has also adopted an average dwell time of 2.4 days, which is agreed, but they have limited the minimum dwell time to 1.5 days. Based on Stena's experience, there are situations where dwell times can be as short as a couple of hours, so this requires amending. DFDS have also assumed that all three IERRT vessels will arrive within a 90 minute window, and this is unlikely to work in a practical sense – in reality this window would be longer and would have to cover a long period of time in the day than DFDS have accounted for. DFDS has also set the import capacity at around 1,450 slots which is incorrect.
69.	The ExA invited the Applicant to respond to the submissions of DFDS' transport expert.	Mr Simon Tucker, on behalf of the Applicant, stated that he had a few points to respond to. Impact on the wider transport assessment if there are different sailing times – The transport assessment sets out a process for the arrival of vehicles. The principal impact in morning peak is when the accompanied vehicles are discharging the vessel and directly leaving the terminal, which is generally after the peak hour. Therefore if the vessel arrival window extended later, those movements would occur later than in the morning peak. In the evening peak, a similar occurrence arises - between 4-5pm about 10% of movements are leaving the port. If those movements shifted to later in the day, then that proportion in the peak hour would go down. If everything moved back an hour or two, then this would have a positive impact on the junction modelling. Normal operating capacity – The view of DFDS is that there is a need for 1,500 slots. However, the Applicant's assessment demonstrates the

		Terminal would have at least 1,446 trailer bays and 156 container stack capacity, as well as another 25 ground slots, with respect to imports. This is therefore above what DFDS had deemed necessary.
70.	The ExA invited the Applicant to respond to CLdN's criticisms of the dwell times that have been provided in the transport assessment.	Mr Strachan, on behalf of the Applicant, stated that CLdN have made general comments of inconsistencies and opaqueness in the transport assessment without providing particular clarity as to what parts of the assessment those allegations relate. Mr Strachan emphasised that the purpose of the transport assessment is to consider the impacts of the reasonable worse case levels. He added that there is a difference between testing what may happen for EIA purposes and a wider point about the issue of need and capacity, and that is not the purpose of this part of the agenda.
71.	The ExA invited the Applicant to respond to DFDS' comments regarding the impacts of delays to vessel departure on traffic.	Mr Tucker, on behalf of the Applicant, stated that the only implication for the traffic assessment is that there is a question as to whether there will be queues out of the terminal onto the port road. If an incoming vessel is delayed, DFDS' assessment shows that the terminal is discharging and therefore reducing the numbers of slots being used in the run up to a vessel arriving. This is because import units are being collected all of the time, and therefore they are leaving the terminal. The terminal then starts to increase in terms of its usage as the vessel is being discharged. In a practical sense, extending the time period would give the terminal more time to discharge naturally. This would reduce the baseload in terms of the number of slots being taken up. The main response to this is that management is important. Stena is very used to this. There are also additional measures to put in place, if

		necessary, in the terminal itself, such as making space at the pre check in. The final point is liaison with customers, as no one wants to be sending urgent goods to sit at the dockside if a ferry isn't coming. Stena always work closely with customers and will notify them if there is a delay, which would prevent people coming to the terminal in the first place. Therefore, delays of a vessel are unlikely to cause issues of congestion.
72.	The ExA asked the Applicant whether it is common practice to take the capacity of vessels as part of the wider storage capacity.	Mr Simon Tucker, on behalf of the Applicant, stated that the Stena operation using a vessel for storage is a by-product of effective stevedoring and is common practice. As soon as a vessel is partially unloaded, you want it to be loaded up as fast as possible so that it can leave as quickly as possible. Using the vessel as storage is the most efficient way of achieving this. Mr Strachan, for the Applicant, noted that Stena can provide confirmation of this in writing (ISH5 AP23).
73.	The ExA noted that, as currently drafted, the 660,000 units per year limit in the DCO permits the Applicant to exceed the 1,800 daily units. The ExA asked whether the proposed development could cope with an excess of 1,800 units in a day and whether, if so, the transport assessment should assess this.	Mr Simon Tucker, on behalf of the Applicant, stated that the practical capacity of the terminal is 1,800 per day, with an efficient working capacity at 80% of that. The limit is therefore not necessary as that is all the terminal can do. It may be prudent if necessary to include an 1,800 daily cap in the DCO, but the development would not be able to do more than this in any event.

74.	The ExA asked the Applicant whether some form of freight management plan or an update to the travel plan would be necessary to secure the practical delivery of the 1,800 daily limit.	Mr Tucker, on behalf of the Applicant, stated that if there were an 1,800 cap in the order then exceeding that would be a breach of the wider DCO. As such this would be an absolute limit. Mr Tucker stated that the Applicant will give some consideration to the freight management plan. **Post-hearing submission** An operational management plan is being submitted as part of the Applicant's Deadline 7 submissions (application reference 10.2.77).
75.	The ExA asked the Applicant to respond to CLdN's submissions that the annual limit should be 525,000.	Mr Strachan, on behalf of the Applicant, stated that an annual cap would not be needed in any event if there was a daily cap.
76.	The ExA asked the Applicant to clarify whether the 80% figure and maximum figure serves to provide an allowance in the event of an exceptional event that causes for traffic to be redirected to the Port of Immingham.	Mr Tucker, on behalf of the Applicant, agreed with the ExA. He added that the starting point in the transport assessment is to assess 1,800 units per day, and the 660,000 annual figure is derived from this. Mr Tucker added that a daily cap would supersede the annual cap, and therefore covers the concerns raised that there may be a day where the number of units exceed 1,800.
77.	The ExA asked the Applicant, if based on DFDS's [REP6-038], that there is insufficient evidence that simultaneous construction and operation has been assessed.	MrTucker, on behalf of the Applicant, stated that the Applicant will consider whether further analysis is required. **Post-hearing submission** A response to this has been provided at Action Point 24 below. This has also been covered at Section 6.4 of the Transport Assessment Addendum (application document 8.4.17(a).1.

78.	The ExA asked the Applicant to clarify the intention for the use of entry lanes for the East Gate.	Mr Tucker, on behalf of the Applicant, firstly noted that the methodology for East and West Gate is now agreed subject to this point. The current drawings show that the left hand lane will be dedicated to cars, but the intention is that both lanes will be available to all vehicles. He added that this annotation has been removed in the change notification, and the lane allocation is not included in the s278 agreement under discussion.
79.	The ExA asked the Applicant whether the removal of the car lane detriment the free flow of cars that was considered a benefit in the original transport assessment.	Mr Simon Tucker, on behalf of the Applicant, stated that there is this change has no impact on the Transport Assessment. He added that the automatic numberplate recognition is being looked at outside of the DCO by ABP, and therefore is not factored into the assessments.
80.	The ExA asked the Applicant to respond to DFDS' points regarding the allocation of East and West Gate.	Mr Simon Tucker, on behalf of the Applicant, stated that the capacity of the security gates is not a constraint to the assignment of traffic. He added that in either case, 100% of the traffic could use either and remain acceptable in terms of operations [REP5-027 Annex A Section 3]. Mr Tucker confirmed that the assumption of 60% using West Gate and 40% using East Gate is being assessed.
81.	The ExA asked the Applicant whether it is correct that as GDH's plan has been appended to the transport statement of common ground that there is agreement between parties on the numbers of local facilities to be considered in influencing traffic.	Mr Simon Tucker, on behalf of the Applicant, stated that two plans are agreed. Firstly, the plan that was prepared in response to TT.12 which relates to public facilities on the network and the location of existing restrictions for HGV movements on local roads. This is relevant to impact on amenity. He added that in terms of third party HGV movements, the location and broad scale of these facilities is agreed. The extent to which this relates to the East/West split is not agreed, but the applicant is assessing 60%

		movement through West Gate without prejudice to the Applicant's view that this is not necessary.
82.	The ExA asked the Applicant whether HGV driver make much use of Sat Navs.	Mr Tucker, on behalf of the Applicant, stated that they likely will use Sat Navs. However, the difference is that HGV drivers attending this facility will be familiar with the local network and routing. The route through East Gate for an HGV driver is much more attractive in terms of the number of junctions and manoeuvres. Therefore, a driver who is familiar with the area would choose East Gate. Mr Tucker added that Stena uses booking systems for drivers and can provide the drivers with routing. At other Stena facilities with multiple entrances, they already have implemented systems to instruct drivers to use certain entrances.
83.	The ExA asked the Applicant if they agree with DFDS that there are issues in the transport assessment.	Mr Tucker, on behalf of the Applicant, stated that there were some outstanding comments that have been received from DFDS prior to Deadline 5 relating to relatively minor changes to parameters. Responses to these were provided at Deadline 6. The Applicant has now agreed these outstanding matters with DFDS and will update the technical note to reflect this. Mr Tucker confirmed that this did not have an impact on the output of the modelling. Mr Tucker stated that there are three highway authorities. First is National Highways who have confirmed that they will review the updated data principally to see if there have been any material changes in safety and queuing, and an updated statement of common ground can be provided. Second is North Lincolnshire Council, who are interested in impact on approaches to the A160. The updated note will go to North Lincolnshire and North East Lincolnshire Councils, and the

		Applicant will provide an updated statement of common ground accordingly. The main point is that these changes do not affect the transport assessment's conclusions on the acceptability of the development and that no specific highway mitigation is needed.
84.	The ExA asked the Applicant when the addendum which is referred to in the transport statement of common ground that addresses the error with the PCU conversion and sensitivity testing within it can be provided.	Mr Tucker, on behalf of the Applicant, stated that the final inputs of the modelling have only just been agreed and this is currently being rerun. Mr Tucker hopes that versions of those assessments will be provided in the coming days to the relevant parties, with the intention of a formal submission of this in Deadline 7. However, this is dependent on there being a response from the local highway authorities. **Post-hearing note:** Please refer to the Applicant's response to ISH5 AP 26 and 27.
85.	The ExA asked the Applicant if the transport statement should be updated in light of the significant number of addendum reports that have been published.	Mr Tucker, on behalf of the Applicant, stated that documents submitted at Deadline 5 reflect the totality of the changes, one of which will be updated. The sensitivity testing note will also add to this. The Applicant proposes to produce a transport assessment addendum which identified those appendices that are superseded by the new assessment. Mr Strachan KC, on behalf of the Applicant, added that an addendum is appropriate for providing updates to information where the totality of the underlying document is not affected. However, the Applicant will consider the easiest way to ensure that all of the additional information is synthesised.

86.	The ExA asked the Applicant whether the submission of a revised transport assessment would impact the EIA regulations.	Mr Strachan, on behalf of the Applicant, stated that there is no requirement to produce a new transport assessment but rather a supplementary addendum to reflect additional information. Mr Strachan added that the purpose of the ES is to start a process of environmental consolation, and this process will inevitably lead to amendments. The Applicant's view is therefore that an addendum is appropriate (see ISH5 AP27).
87.	The ExA asked the Applicant whether an addendum to the transport assessment would fall within Schedule 6 to the DCO.	Mr Strachan, on behalf of the Applicant, confirmed this to be the case.
88.	The ExA invited the Applicant to consider CLdN's question as to whether the transport addendum would include an assessment of noise, and if this would then trigger the EIA regulations.	Mr Strachan , on behalf of the Applicant, confirmed that if there were knock on effects on the transport assessment on the wider ES then this would need to be considered. However, the Applicant is of the view that this will not be necessary.
89.	The ExA asked the Applicant to respond to generally to comments raised by interested parties relating to mitigation.	Mr Tucker, on behalf of the Applicant, agreed that the National Policy Statement for Ports is the document that should be taken into account when considering the need for mitigation. Mr Robbie Owen, for CLdN quoted paragraph 5.4.24 of the policy, which relates to accessibility rather than capacity, and as such this is not the correct test. At Deadline 6, the Applicant produced a paper outlining its interpretation of the policy. The requirement of the policy is to consider whether the development gives rise to a substantial impact on the surrounding transport infrastructure, as set out in paragraph 5.4.9.

		Mr Tucker emphasised that the first test is whether the development itself gives rise to a substantial impact. The Applicant says no, and the evidence submitted demonstrates this. He added that there is no trigger in policy that requires mitigation if certain junctions are operating beyond an arbitrary traffic capacity figure (e.g. 0.85 RFC). Instead, the decision maker has to look at what changes occur on the network as a result of the development, and whether that impact is substantial. He clarified that this is all set out clearly in the Applicant's note. Dwell Time - Mr Tucker clarified that dwell times have not changed from the original assessment, but instead the Applicant has disaggregated the imports and exports.
90.	The ExA invited the Applicant to provide any final comments on transport.	Mr Tucker, on behalf of the Applicant, noted that Ms Tafur erroneously referred to a local policy in her submissions, but this is actually a technical note produced by consultants for North East Lincolnshire so it does not have a formal policy basis. Mr Tucker added that **[REP-034]** sets out how cumulative impact should be assessed, and this position has been affirmed by a High Court Judgment which shows that the question is whether the impact of the proposed development is severe.
Agenda Item 4 – Any Other Business		
91.	The ExA asked the Applicant whether the Market Study Report is accurate in relation to the impacts in Killingholme.	Mr James Strachan KC, on behalf of the Applicant, noted that the Applicant will consider whether this requires a targeted update. **<u>Post-hearing submission</u>** The Applicant will be producing a targeted updated Market Study Report shortly after Deadline 7.

92.	The ExA asked the Applicant to reconsider its assessment of the cumulative impact of the IGET application, in addition to the Viking NSIP.	Mr James Strachan KC, on behalf of the Applicant, stated that the Applicant will consider this. **Post-hearing submission** The Applicant has submitted an updated Chapter 20 for Deadline 7 (application document 8.2.20).
Hearing Closed 18:00		

3 Table 2: Issue Specific Hearing 5 Action Points

Action	Description	Action by	Deadline	Applicant's Comment/where has the action been answered
1	Provide further data relating to the passage of Britannia Seaways into Immingham Lock observed during course of Accompanied Site Inspection on 26 September 2023 – wind and current speeds in both m/s and knots, wind direction and time spent stemming.	DFDS	D7	
2	Submit notes of project governance meetings held in October 2022, including details of the inputs on costs and benefits for the potential controls that were being considered and conclusions drawn.	Applicant	D7	Notes of the project governance meeting held in October 2022 are appended to the updated version of the NRA submitted at Deadline 7.
3	Review and resubmit sections 9.7 and 9.8 of the NRA [APP-089], and review NRA and update accordingly to address how baseline NRA for Port of Immingham has been factored into the assessment.	Applicant	D7	A restructured version of the NRA together with a Supplementary Navigation Information Report (SNIR) has been submitted at Deadline 7. Further explanation as to how the Marine Safety Management System, which defines the baseline for marine safety within the Port of Immingham, is informed by the output of the IERRT NRA has been included in the restructured NRA.
4	Add as annexes to the NRA (to be submitted with AP3 above) the following documents:	Applicant	D7	The HASB meeting minutes and briefing papers for 12 December 2022, together with

	• The Harbour Authority and Safety Board (HASB) December 2022 meeting minutes; • The briefing paper/report prepared for the HASB meeting in December 2022; and • the Applicant's responses to IOT Operators' and DFDS' NRAs.			other relevant navigation documents, are provided as appendices to the SNIR. The SNIR collates all key information in respect of navigational issues and identifies the key matters that have arisen during the course of the examination in terms of navigational risk.
5	Provide, with commentary including temporal and spatial information, graphic representations of the arrival and departure of vessels throughout a day with challenging met-ocean conditions for: • the existing Port of Immingham; and • the existing port plus projected vessel movements to and from the Proposed Development. DFDS: Make available to the Applicant data on scheduled services for the Inner Dock (with lock usage information) and the Outer Harbour, with AIS tracks of vessel movements. IOT Operators: Make available data on vessel movement to and from the IOT, to assist the Applicant's	Applicant, DFDS and IOT Operators	D7	Graphics and a commentary have been provided by the Applicant at Deadline 7 – **see document reference 10.2.73**.

	preparation of the graphic representations.			
6	In connection with the construction and operation of the Proposed Development, submit a note explaining precisely which duties or functions (including issuing of consents) would be discharged respectively by the HMH and the Applicant/undertaker (including the Dock Master), detailing any division of responsibilities that there might be in practice and what consultations might be necessary between the HMH and the Applicant/undertaker. The submitted note should identify the legislation applicable to the discharging of the respective duties and functions.	Applicant and HMH	D7	A joint note, prepared by the Applicant and the HMH, has been submitted by the HMH on behalf of both parties.
7	Fulfil Action Point 16 from ISH3 and submit the reports of the November 2021 simulations relating to the now-abandoned four berth scheme design.	Applicant	D7	This report is provided at **document reference 10.2.74 – Navigation Simulation Study December 2021** submitted by the Applicant at Deadline 7. It should be noted that these simulations were conducted at an early stage of the project development and its consequent evolution. The simulations undertaken were in fact the first time the berths, in their early iteration, were simulated.

				No Pilots or PECs had previously manoeuvred in this area. As was the purpose of the exercise, lessons were learnt from this set of simulations and this has been evidenced by the success of the subsequent simulation exercises undertaken and as Pilots and PECs have become more familiar with the location. This type of evolution is typical (and indeed essential) in the design development processes.
8	Comment on: • How long it is expected it would take to design, build and commission the "Design Vessel". • What the maximum unit capacity is for a Stena T class vessel. • What the maximum capacity of freight units would be for the proposed "Design Vessel".	Applicant and Stena Line	D7	A response, prepared by Stena Line, is provided as **Appendix 1 to this document**.
9	Obtain information from tug operators about the likely timescales for expanding the tug fleet both in the short and longer terms, including how long it takes to design, build and commission new tugs.	Applicant	D7	Responses from Svitzer and SMS Towage are provided as **Appendix 2 to this document**.
10	Respond in writing to letters provided by IOT Operators in [REP6-046], notably on comments on change 1 and change 4 – on changes to	Applicant	D7	A written response to IOT Operators letters **[REP6-046]** is provided at **document reference 10.2.67** submitted at Deadline 7.

	pipework and MLAs, IPM, impact speed. That response should be provided to the IOT Operators urgently and submitted as an Examination document not later than D7.			
11	Give examples of any instances when IOT Operators have found it difficult to operate the IOT because of the operation of other parts of the Port of Immingham.	IOT Operators	D7	
12	Clarify whether risks to the operation of the IOT (as distinct from allision) was considered prior to the navigational simulations undertaken in November 2022.	Applicant	D7	The operation of the IOT, in particular the existing operation of the IOT finger pier, was a key consideration in informing the design of the proposed IERRT infrastructure and was considered before the navigational simulations undertaken in November 2022. In December 2021, navigation simulations included testing vessels navigating to and from berths on the IOT finger pier. The conclusion of this study was that operations at the IOT finger pier would not be adversely affected by the proposed size and location of the IERRT infrastructure. Indeed, from this exercise, it was advised that the final design should maximise the space available between IOT and IERRT, and this was a key design parameter when finalising the location and orientation of the berths (alongside other considerations such as the location of capital dredging and intertidal habitat loss).

				A further navigation simulation study undertaken in April 2022, which looked at a slightly different orientation of the berths compared to that studied in December 2021, also tested navigation to and from the IOT finger pier and same conclusion was reached. This same principal was tested throughout the navigational simulations that have been undertaken, using a range of vessels that use the IOT finger pier, to ensure risks to the operation of the IOT (as distinct from allision) was factored into both the design and assessment of the proposed IERRT project. Risks to the operation of the IOT are considered from a socio-economic impact perspective in Chapter 16 of the ES **[APP-052]** and from a navigation risk perspective and in Chapter 10 of the ES **[APP-046]** and the NRA **[APP-089]**. Prior to the submission of these assessments with the DCO application in February 2023, and prior to November 2022, impacts to the IOT were also considered in the Preliminary Environmental Information Report (PEIR).
13	Make available details of simulations undertaken in connection with the change of vessel type for Immingham Outer Harbour, to the extent that those details remain available.	DFDS	D7	

14	Ensure post-ISH5 submission includes details of: • The largest Ro-Ro vessels currently using the Port of Killingholme and how that vessel type compares with the "Jinling" vessel type. • What the two highest risks assessed for berthing and unberthing the largest vessel at the Port of Killingholme are. • What risk controls are applied at Killingholme for those highest risks.	CLdN	D7	
15	For the simulations undertaken in November 2023, use best endeavours to share report during the week of 27 November, together with the parameters used to inform the simulations. These are to be provided to the IOT operators in advance of D7 to enable comment.	Applicant	As soon as possible and not later than D7	The Applicant submitted two HR Wallingford reports to the examination alongside its Change Request dated 29 November 2023. These reports were published with the ExA's acceptance of the changes on 1 December 2023 – and were shared with the IOT Operators on 4 December – and are available at **[AS-071]**. The two reports provided in **[AS-071]** are: - the HR Wallingford Report '*Navigation study considering revised flows and impact protection*' (DRJ6612-RT013-R02-00), which contains the results of the 15 November simulations which were undertaken to understand the navigational effects associated with

				Change 4 – enhanced management controls and options for the potential provision of impact protection measures to the IOT finger pier. This report also incorporates the headline findings from the flow modelling work undertaken with respect to the increased dimensions of the southern pontoon. - DRJ6612 – Enhanced Operational Controls, which contains the results of the 15 November simulations which were undertaken to assist in understanding the effectiveness of the use of tugs as an enhanced operational control.
16	Submit the results of the tidal modelling update which takes account of the new pontoon arrangements. To be provided as joint note with IOT Operators to the extent possible. (The results and a draft note will need to be available of IOT Operators in advance of D7 to enable it to comment.)	Applicant IOT Operators	As soon as possible and not later than D7	As explained in response to Action Point 15 above, the Applicant submitted DRJ6612-RT013-R02-00 alongside its Changes Request **[AS-071]**. This report incorporates the headline findings from the flow modelling work undertaken with respect to the increased dimensions of the southern pontoon on peak spring tide conditions. HR Wallingford recommended that the flow modelling work should be extended to understand the effect on mean spring tide conditions. The Applicant agreed to

				commission this further work and received a technical flow modelling report from HR Wallingford on 8 December 2023 (report reference DJR6612-RT015 R01-00). The Applicant provided this to the IOT Operators on 8 December. This report is provided at **document reference 10.2.75 – 3D modelling of revised layout** submitted by the Applicant at Deadline 7. Further to this, the Applicant wrote to the IOT Operators on 29 November with notice of Navigational Simulations to be held on 13/14 December. The scope of the simulations included: • Study the effectiveness of Tugs when used as enhanced control measures at IERRT Berth 1; • Consider the effect of the proposed impact protection on operations at IERRT and for coastal tankers at the IOT finger pier; and • Understand the flow model effects due to the increased size of the southern IERRT pontoon. The Applicant asked whether the IOT Operator's technical consultant could be available on 1 December for a call to work in

				collaboration to develop a suitable run plan. The IOT Operators responded on 30 November to request further information from the Applicant including a draft simulation plan in advance of the call. HR Wallingford and the Applicant did not have a draft in advance, as the purpose of the briefing call was to seek input to develop the draft. HR Wallingford and an ABP employee who provides technical expertise to the CHA proceeded with the briefing call on 1 December without the IOT Operators. HRW proceeded to develop a run plan but noted that key resources from HRW were on annual leave after 1 December, returning 11 December. The Applicant provided further responses to address the IOT Operator's queries on 4 December (including provision of the report DRJ6612-RT013-R02-00 described at Action Point 14 above). The Applicant noted that HRW had resourcing constraints for the week ahead and noted that they would be grateful for the IOT Operators' acknowledgement of this and patience during this time. The IOT Operators submitted a letter to the Immroro consultation mailbox on 4 December regarding the Vessel Impact Protection. The IOT Operators further responded to the

				Applicant's correspondence regarding the additional navigational simulations on 6 December raising further queries regarding the simulations and stating that all information must be provided in writing ahead of calls/briefings. The Applicant responded to IOT Operators queries on 8 December and confirmed that it would also respond to letter of 4 December. During this period, HRW's technical analysis of the flow modelling was still ongoing. The Applicant received a report on 8 December which it shared with the IOT Operators the same day. Whilst there is limited time available for the IOT Operators to consider the flow modelling report before D7, the Applicant has made clear since 29 November that one objective of the simulations proposed for 13/14 December is to include an understanding of the effects due to the increased dimensions of the southern pontoon. As at 8 December, the Applicant is still awaiting a formal confirmation that the IOT Operators will actually attend the simulations (although the IOT Operators have confirmed indicative availability). The Applicant hopes that the IOT Operators will participate collaboratively in the simulations to allow both parties to consider

				the effects of the southern pontoon and provide a further update after 13/14 December.
17	Submit explanation why a 'Senior Safety Workshop' and 'commercial workshop' referenced by DFDS in [REP2-039, paragraph 15] were cancelled by the Applicant and were not rescheduled.	Applicant	D7	The Senior Safety Workshop (or forum) referenced was initiated at the request of the CEO of ABP, Henrik Pedersen. A request to attend a safety forum was issued to the senior executive management of a number of key stakeholders. The proposed objective of the meeting was to improve the understanding of how ABP intend to incorporate the proposed IERRT project into Humber operations. It was intended that the meeting be attended by the executive management of the various organisations. However, despite attempts to agree a suitable date, it was not possible to secure attendance of suitably senior representatives from the various organisations and therefore the meeting was cancelled. Following this, ABP continued to engage with DFDS and IOT Operators

				through their regular executive engagement meetings. Commercial Workshop: A commercial workshop was suggested during the Applicant's visit to DFDS in Copenhagen on 13 October 2022 No formal arrangements, however, were made for a workshop. It should be noted that the Applicant does in any case hold frequent commercial meetings with DFDS, at which DFDS are able to raise any concerns.
18	Submit copy of the Lake Lothing NSIP made DCO plus a note of the operational controls in the Lake Lothing Crossing DCO that are relevant for IERRT.	Harbour Master	D7 (Already actioned)	
19	Submit copy of the Tilbury 2 and Able NSIP made DCOs.	Applicant	D7 (Already actioned)	These DCO's have been submitted and accepted to the Examination Library – see **[AS-**.
20	Share documentation for the proposed Change Request as soon as possible with CLdN, DFDS, IOT and HMH.	Applicant	As soon as possible and not later than D7	The Change Request documentation has been circulated to the IPs.
21	Applicant to provide inputs for updated terminal capacity modelling to DFDS.	Applicant	As soon as possible	This was provided on 28 November 2023 at 16.57 by email to DFDS.
22	Undertake an update to DFDS terminal capacity modelling using inputs provided by Applicant and	DFDS	D7	DFDS provided initial outputs from their modelling on 4 December 2023. This was subject to a meeting on 8 December 2023 and it is understood a further version of the

	submit results as an Examination document.			assessment will be submitted at D7. The results of that modelling appear to support the general conclusions reached by the Applicant on terminal capacity (as explained at **[REP5-032]** Appendix 4. The applicant will provide a full response to the assessment at Deadline 8.
23	Provide note explaining the general operational management for the Proposed Development, including an explanation of unloading/loading procedures.	Stena Line	D7	This has been prepared and submitted at Deadline 7. The note confirms the expected operation of the terminal is consistent with international norms in terms of loading and unloading of vessels and the procedures for dealing with freight units within the terminal. It supports and explains the assessment already provided in **[REP5-032]**.
24	Explain why sequential construction and operation would be the worst-case ES scenario.	Applicant	D7	As detailed in Chapter 3: Details of Project Construction and Operation **[AS-065]** of the Environmental Statement, two construction scenarios are possible for the Project. As part of each individual environmental topic assessment, both scenarios were considered by the relevant technical assessors to identify which of the two scenarios would give rise to the largest potential for likely significant effects, thus the worst-case scenario. It is important to recognise that a worst-case assessment of sequential construction and operation was not pre-judged, and was considered on a case by case basis for each environmental topic.

				The justification as to why a certain scenario represents the worst case for each topic is dependent on the topic, receptors and impact pathways being assessed. As such, the explanation is different for each topic. The explanations are provided within the following chapters and paragraphs: • Chapter 7: Physical Processes **[APP-043]** paragraph 7.8.4. • Chapter 8: Water and Sedimentary Quality **[APP-044]** paragraph 8.8.5. • Chapter 9: Nature Conservation and Marine Ecology **[APP-045]** paragraph 9.8.9. • Chapter 11: Coastal Protection **[APP-047]** paragraph 11.8.7. • Chapter 12: Ground Conditions including Land Quality **[APP-048]** paragraph 12.8.12. • Chapter 13: Air Quality **[APP-049]** paragraph 13.8.4. • Chapter 14: Noise and Vibration **[APP-050]** paragraph 14.8.21. • Chapter 15: Cultural Heritage and Marine Archaeology **[APP-051]** paragraph 15.8.5. • Chapter 16: Socio-economic **[APP-052]** paragraph 16.8.4. • Chapter 17: Traffic and Transport **[APP-053]** paragraph 17.8.4

				• Chapter 18 Land Use **[APP-054]** and 18.9.12 • Chapter 19: Climate Change **[APP-055]** paragraph 19.8.9 It was considered that differing risks may be generated as a result of concurrent construction and operation as opposed to sequential for the assessment of navigational risk. This is, therefore, assessed separately in this instance. This is explained in Chapter 10: Commercial and Recreational Navigation **[APP-046]** paragraph 10.8.1 to 10.8.5 and based upon the wider Navigational Risk Assessment, which is provided within Volume 3, Appendix 10.1: Navigation Risk Assessment **[APP-089]**.
25	Give consideration to producing and submitting an operational freight management plan, including how any such plan could promote routing towards East Gate	Applicant	D7	This has been prepared and is submitted at Deadline 7. The Operational Freight Management Plan includes measures to optimise operation within the terminal itself, encourage the use of the East Gate and to cover the dissemination of information to hauliers and other uses of the facility in terms of access to the terminal. The plan further includes a monitoring strategy in terms of usage of the terminal in respect of the proposed daily throughput cap (1,800 units per day).

26	Update [REP5-028], including sensitivity testing and to reflect any updated position(s) agreed with highway authorities.	Applicant	D7	For the reasons set out in Section 6 of **[REP5-027]** the overall assumptions adopted in the TA are considered to appropriately and adequately assess the impact of the proposals on the wider network. Notwithstanding this, CLdN and DFDS have set out their outstanding concerns relating to the distribution of traffic. In particular they contend that the TA under-estimated the level of traffic using West Gate. The Applicant's explanation as to why this is incorrect is set out in Appendix B of **[REP5-027]** and the evidence provided is considered to justify clearly the approach adopted and outcome in respect of the level of traffic forecast to use West Gate. Accordingly, whilst the assumptions put forward by CLdN and DFDS cannot and are not agreed, the sensitivity assessment goes on to consider the implications of the 60 / 40 West Gate / East Gate split simply to test the implications of the DFDS and CLdN assumptions without accepting their validity. The ExA should note that the scenarios proposed by DGDS and CLdN are considered by the Applicant to go significantly beyond any realistic worst case and well beyond what is reasonably required by the assessment process.

				The sensitivity assessment has been prepared and was issued in draft to DFDS, CLDN, NELC, NLC and National Highways on 30 November 2023. A final version is submitted as part of the Addendum TA requested at AP27 below. This assessment concludes that the range of flows that are tested in the sensitivity test further confirm that the network is resilient in terms of differing flows, with the net difference between the updated TA base case **[REP5-028]** and the sensitivity test being marginal in terms of overall impacts. Consideration of mitigation is not therefore warranted in terms of the requirements set out in the National Planning Policy Statement for Ports (see **[REP6-034]**.
27	Consider which of an updated Transport Assessment (TA) or a TA Addendum would be more appropriate to supersede incorrect information, address updates and points of clarification and submit the relevant document.	Applicant	D7	A Transport Assessment Addendum has been prepared and is submitted by the Applicant at deadline 7 as **document reference 8.4.17(a).1 – Transport Assessment Addendum**.
28	Submit a junction sensitivity note identifying what mitigation would potentially be needed at A1173/Kiln	DFDS	D7	

	Lane roundabout; A1173/SHIIP roundabout; A160/Manby Road roundabout; Habrough Road roundabout; and A160/A180 roundabout.			
29	In connection with the preceding action point: 1) Make available to the Applicant drawings showing any identified junction mitigation works as soon as possible after the close of ISH5. 2) The previously mentioned drawings to be submitted as an Examination document(s) at D7.	DFDS	As soon as possible after close of ISH5 (1) and D7 (2)	This was received at 16.12 on 8 December 2023. As a consequence, the Applicant has not had the opportunity properly to consider it in advance of D7. The Applicant's position in respect of mitigation ,however, remains as set out in **[REP6-034]** and explained orally at ISH5.
30	The outcome of the discussions between DFDS and the Applicant regarding potential junction mitigations measures to be discussed with North East Lincolnshire Council, North Lincolnshire Council and National Highways.	Applicant	As soon as possible after close of ISH5	The Applicant's view remains that no mitigation is necessary as set out in **[REP6-034]**. A technical note including finalised sensitivity testing and the final version of Technical Note 2 (Updated Annex K of **[AS-008]**) was issued to North East Lincolnshire Council, ("NELC"), North Lincolnshire Council and National Highways on 28 November 2023. The same information alongside and Technical Note 4 (Updated Annex M of the TA) and an internal junction sensitivity test was provided to DFDS and CLdN on 30 November 2023.

31	Seek to agree updated SoCGs with highways authorities to take account of updated REP5-028 and sensitivity testing and any required mitigation/ contributions.	Applicant	D7	NELC have reviewed the additional data and confirmed it to be acceptable and this is reported in the updated SOCG. NLC have confirmed by email that they likewise have considered the updated assessments and sensitivity tests. They have confirmed that they agree East Gate would be the most appropriate route choice for drivers. They have noted the sensitivity tests and confirm that they are satisfied the NLC network will continue to operate within theoretical capacity. They seek no mitigation. This will be formally confirmed in an updated SOCG. Comments from NH are awaited (likely to be Deadline D7A).
32	Consider whether relevant parts of the Market Forecast Study [APP-079] need to be updated in relation to its comments on CLdN's facilities at Killingholme.	Applicant	D7	The Applicant has considered this request and is in the process of updating the Market Forecast Study. This will be provided no later than 15 December 2023.
33	Submit a more comprehensive cumulative/in-combination effects assessment for the proposed Immingham Green Energy Terminal and similarly undertake a cumulative/in-combination effects assessment for the recently accepted	Applicant	D7	An updated version of Chapter 20 of the ES **[APP-056]** has been provided by the Applicant at Deadline 7. An updated version of the HRA Report **[REP5-020]** is also provided at Deadline 7.

	Viking Carbon Capture and Storage Pipeline NSIP application.			This includes updates to the cumulative/in-combination assessment, and addresses further comments from Natural England in its Deadline 6 submission as well as the points raised in the Report on the Implications for European Sites.

Glossary

ABP	Associated British Ports
ALARP	As Low as Reasonably Practicable
Applicant	Associated British Ports
CHA	Competent Harbour Authority
CLdN	CLdN Ports (Killingholme) Ltd
DCO	Development Consent Order
DFDS	DFDS Seaways Plc
ExA	Examining Authority
HASB	Harbour and Safety Board
IOT Operators	Immingham Oil Terminal
NRA	Navigational Risk Assessment
PEC	Pilotage Exemption Certificate
RFC	Ratio of Flow to Capacity (in respect of junction modelling outputs)
SCNA	Statutory Conservancy and Navigation Authority
SHA	Statutory Harbour Authority

Appendix 1 – Response to ISH5 Action Point 8

I write on behalf of Stena Line BV (**SLBV**) to provide a response to question 8.0 Specific Hearing 5 (ISH5) contained within your written action points dated Tuesday 21 November and Wednesday 22 November 2023.

In so doing, I would also like to take the opportunity to bring to the ExA's attention some actual facts about the capabilities of our vessels – and the vessels that we will be operating at the IERRT development when operational – bearing in mind the somewhat misleading statements that have been made by others during the examination..

For the last few months we have sat through the examination hearings and have listened to statements made by certain parties about the alleged risks likely to be posed by our vessels when approaching or departing from IERRT. We have up to now principally just listened to and read – albeit with increasing frustration – comments about our vessels, their capability and their manoeuvrability, which have no actual foundation in fact but are, in our view, mere ventures into alarmist fiction.

The ExA is being told by the lawyers for various Interested Parties of the risks that will arise in a scenario which requires –

a) A strong south easterly wind blowing towards the IOT trunkway;

b) On a fast moving ebb tide; with

c) The Stena T's two independent main engines both failing; and

d) Its two independent auxiliary power sources also both failing; and

e) All of its backup systems failing; whilst at the same time

f) The vessel's two independent anchors both fail to deploy; and

g) Where a tug is involved, its engines also fail – and

h) The drifting vessel then manages o thread its way between the IERRT's northern pontoon and the IOT finger pier –

- with the consequent risk of allision with the IOT trunkway

Putting aside the successful navigation simulations about which you have heard, such a scenario, viewed objectively, is in fact far removed from reality.

Stena Line is very proud of its safety record and with apologies for taking the ExA's time, I think it is very important that the ExA understands the capabilities of the Stena Line T-Class

vessels. Very much as an over-simplified summary, the principal elements of the T-Class vessel's power supply are as follows –

i) Two independent main engines;

ii) Two independent auxiliary engines (generators);

iii) Two independent shaft generators;

iv) Two independent bow thrusters;

v) One emergency generator;

vi) Back-up UPS (batteries);

vii) Two independent deployable anchors.; and

viii) An emergency back-up generator.

To put this in context, I provide below four sailing scenarios –

Scenario 1: Normal sea mode –

The vessel is running on both main engines (1/2) and both the shaft generators are feeding the main switchboard. If one of the main engines were to fail, the vessel would only lose power on one half of the main switch board, but this will without delay, and automatically, be taken over by either generator 1 or 2 depending on which one of the main engines were to fail. In other words, the vessel would lose half propulsion but there will be no blackout/failure on other systems.

Scenario 2: Diesel generator mode –

Ship is running on both main engines (1/2). The electrical power of the ship will be from either generator 1 or 2 or both. Back-up power comes from the shaft generators. If one of the main engines were to fail the vessel would lose half propulsion but there would be no blackout on other systems.
This mode is used when switching over from sea mode to manoeuvring mode or when extra power is needed at sea for the main propellers.

Scenario 3: Manoeuvring mode –

The vessel is running on both main engines (1/2), electrical power for the vessel is from either generator 1 or 2 or both.

Back-up power is immediately available from emergency generator should both generators 1 and 2 fail. The bow-thrusters are independently directly fed from their dedicated shaft generators.
If, therefore, one of the main engines were to fail, the vessel would only lose half of its propulsion and one bow thruster. All other systems will work as normal.

***Scenario 4: Explanation* of back-up systems –**

If a generator were to fail when manoeuvring, the vessel's second generator will automatically take over. If both generators fail or the main switch board were to fail, the emergency generator and emergency switch board would take over. If the emergency generator were to fail, UPS will take over dedicated groups of the power supply - for example, emergency steering, lighting, engine control, navigational equipment etc. It should also be remembered that both anchors can be deployed independently.

Viewed entirely objectively, I hope the ExA will understand from the vessel capability summary above that the likelihood of a Stena vessel experiencing a complete failure of everything is completely remote – and for that matter has never happened in the 12 years that Stena has been operating these vessels.

Turning now to the specific Action addressed to Stena Line from ISH5, our answers are as follows -

Applicant and Stena Line

a) ***How long it is expected it would take to design, build and commission the "Design Vessel".***

The "design vessel" which it should be noted has only been identified for the purposes of the DCO application as a vessel "envelope" to assist in establishing the resilience of the proposed IERRT development, is likely have a lead time of approximately 4 years for the design, build and commission. This is, we believe, a realistic estimate taking into consideration existing shipyard indications if taken from scratch.

b) ***What the maximum unit capacity is for a Stena T class vessel.***

The T class vessels have an operational lane metre capacity of 3700 lane metres. As the T class vessels are so called: Ro-Ro cargo/passenger vessels equipped with 130 cabins available for lorry drivers, the allocation of unaccompanied and accompanied units is driven by the maximum capacity of cabins.

Subsequently the average lane metre per unit for this type of vessels is aggregated at 15.6 metres including the stowage factor to allow for both types of units which naturally differ in length.

Operational capacity T Vessels: 3700 LM/15,6 is 237 units whereof max. 130 accompanied lorries and 107 unaccompanied trailers.

c) ***What the maximum capacity of freight units would be for the proposed "Design Vessel".***

The operational capacity of the proposed design Ro-Ro cargo vessel will be 6000 lane metres. The average lane metre per unit for this type of vessels is 14 metres including the stowage factor. The maximum capacity of freight units will be 428 units with a maximum of 12 accompanied lorries and 416 unaccompanied trailers.

In this context, the ExA should note that the stowage factor of Ro-Ro cargo is the ratio of the length and width to stowage space required under normal conditions. It indicates how many of a particular type of cargo vehicle occupies in a hold, taking account of unavoidable stowage losses in the means of the CTU (Cargo Transport Unit).

We trust that the above provides the information sought in answer to Action 8.0.

Yours sincerely,

Stena Line BV,

[redacted]

S.M. van der Vlugt,
Senior Manager Port Development & Deputy Trade Director,
Business Region North Sea.

[redacted]

Appendix 2 – Letters from Svitzer and SMS Towage in response to ISH5 Action Point 8

SVITZER

To Whom it may concern,

Regards the concerns raised, yes during busy periods the tug utilisation is high for both providers on the river however without knowing the exact volume and requirements of the vessels intended to use the new berths it is difficult to say if or how many additional tugs would be required to service this safely and reliably in addition to the other port users.

That aside Svitzer are able to mobilise tugs from anywhere within the UK or Europe to provide additional support in Immingham either temporarily or permanently depending on the future requirements of the customer and the port.

In addition, new buildings can be received within anywhere from 3-12 months depending on the required specification and urgency.

I think what is important here is that we understand the customer and port requirements and plan accordingly for that. If the volume and need is such that we require extra vessels or vessels of differing qualities to the ones we currently have in Immingham this can be planned and actioned.

We look forward to working with ABP on this and providing the necessary towage options moving forward.

Oliver Burke

Assistant Port Manager/Technical Superintendent

[redacted]

Reply to IERRT ISH3 Action Point 9 and points raised.

SMS have 9 tugs on the Humber. From January we move to the East Jetty with 4 of the fleet which increases our availability greatly, by not being locked in behind the dock gates.

The number of vessel movements in the Humber is showing a declining trend overall. Despite this declining market we have increased our fleet and from working with ABP improved our provision offering. We can always move additional resource, from our fleet, which we have done on many occasions, and chartering tugs is something of a common practice for us.

The need to procure something new has occurred this year, the Tradesman which arrived in September '23 shows our commitment to the river. Incidentally, our naming ceremony for the new tug last month, was attended by DFDS personnel.

The comments raised in ISH5 by the Interest Parties seem to be based on little knowledge of the Humber and certainly a lack of experience of towing in the area.

The time to procure new is 11 months, shorter if there is a previously owned tug available, of such our chairman's contacts are amongst the best in the business.