THE PROPOSED ASSOCIATED BRITISH PORTS (EASTERN RO-RO TERMINAL) DEVELOPMENT CONSENT ORDER

DEADLINE 4

Response on behalf of the Harbour Master, Humber

to

ExQ2

PINS Reference Number	TR030007
Interested Party Reference Number	IMRO-OP001
Document Ref.	HMH 11
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Date	09 October 2023

Examining Authority Question Number	Examining Authority's Question and Applicant's response	Response on behalf of the Harbour Master, Humber
NS.2.01	Examining Authority's Question	Harbour Master, Humber Response
Responsibility for safety management in the Port of Immingham	Based on the contents of the "Immingham and River Humber – Management Control and Regulation" note [REP1-014] is the ExA correct in believing that it is the Port of Immingham SHA which has responsibility and authority for the safety management system applicable to the Port itself, acting in liaison with the Humber Harbour Master as Competent Harbour Authority (CHA) responsible for pilotage services and as the SHA	The Harbour Master, Humber ("HMH") confirms that this is correct.

	operating Vessel Traffic Services?			
NS2.08	Examining Authority's question	Harbour Master, Humber Response		
NS2.08 Equally challenging manoeuvres undertaken on the Humber		Although this question is directed at the applicant, HMH is providing a response to assist the ExA. ABP Humber Estuary Services is the Competent Harbour Authority providing Pilotage for all the ports of the Humber Estuary as well as the River Trent as far as Gainsborough and River Ouse as far as Goole. In 2002 some 22018 vessel movements were carried out with a Pilot or Pilotage Exemption Certificate (PEC) holder. Navigation over such a broad area is varied and complex. The types of vessels vary from the largest Crude Carriers trading to Immingham down to small coastal vessels trading to the Trent and Ouse. Each destination has its own specific conditions which need to be understood, and many of the destinations are tidal, requiring passage planning to ensure sufficient under-keel clearance as well as consideration of strong tidal sets which may be encountered and Meteorological conditions. Guidance and procedures for each destination are laid down and experience and knowledge is provided through training, and verified prior to Authorisation. To this end it is important to note that the Authorisation of a PEC is specific to both a destination and vessel type. There have been a number of Ro-Ro capable infrastructure projects delivered over the last twenty years including Immingham Outer Harbour,		
		There have been a number of Ro-Ro capable infrastructure projects delivered over the last twenty years		

		development.		
NS.2.09 Pilotage incidents and consequences	Examining Authority's Question Explain what actions were taken in response to the incidents that were subject to investigations undertaken by the Marine Accident Investigation Branch (MAIB), as cited in DFDS's Relevant Representation [RR-008].	Although this question is directed at the applicant, the information is available to HMH and so is being provided by him to assist the ExA. The actions undertaken in relation to investigations undertaken by the Marine Accident Investigation Branch (MAIB) cited in DFDS's Relevant Representation RR-008 are set out below save for the incident involving BOHINJ as HMH has been unable to locate a MAIB record for that incident.		
		December 2000 Cargo vessel Xuchiang hia collision with Aberdeen at IOT1		
		Actions taken were:		
		A Notice to Mariners following the collision highlighting:		
		a. The speed limit contained in the navigational bylaws;		
		b. Vessels which pass the Immingham Oil Terminal jetties must not approach nearer than 150m from the face of the berths;		
		c. All vessels inward who require tugs to berth at any Immingham berth / jetty or South Killingholme Oil Jetty must reduce their speed and complete making tugs fast before the vessel passes Berth No. 3 of the Immingham Oil Terminal;		
		d. All other vessels must ensure that they maintain good steerageway having regard to the prevailing tidal and meteorological conditions.		
		2. A new sector light on the Humber International Terminal was installed to aid vessels on the approach		
		3. Parameters for establishing		

the time of entry/exit from the locks of tidally restricted vessels were reviewed and discussed with pilots, tug operators and the harbour master's department in light of this incident.

- 4. Recommendations for the Cosco Bulk Carrier Company:
- a. Further highlighting the prohibited area off the IOT;
- b. Monitoring the exclusion zone off the IOT and, if deemed to improve overall safety, to incorporate it in navigational bylaws;
- c. Prescribing specific locations for tugs to meet inbound vessels;
- d. Implementing procedures to be followed should tugs not be connected as required by H.9/2001;
- e. Amending navigational bylaws to clarify whether the 5-knot speed limit refers to speed through the water, or speed over the ground;
- 5. Recommendations for the owner:
- a. Ensure its vessels have a pilot card available containing the information, and in the format, suggested in the ICS Bridge Procedures Guide.
- b. Ensure its masters and navigational watchkeeping officers have an adequate knowledge of the English language for safe pilotage operations.

April 2002 Stena Gothica allision with Immingham East Jetty

- 1. Recommendations for ABP:
- a. Ensure that whenever control measures, such as fenders, are missing, masters are informed

before their arrival at the port;

- b. Ensure that whenever fendering is removed, for repair or any other reason, that it is replaced by temporary fendering of equivalent strength;
- c. Emphasise the advantages of advanced planning among its pilots;
- 2. Recommendations for Stena Line:
- a. Take due care in the operation of Stena Gothica and conduct risk assessments as appropriate, having regard to the inherent danger of the vessel design;
- b. Ensure that its masters fully assess the risks before taking the conduct of the navigation when a pilot is available and are aware of the advantages of advanced planning.

July 2008 Fast Filip collision with tanker berthed at IOT1

(NB the DFDS submission incorrectly dates this incident as occurring in 2015.)

- 1. Recommendations for ABP:
- a. The Chief Inspector of Marine Accidents wrote to ABP Humber Estuary Services raising his concerns at the pilot's lack of planning for the turn, his apparent lack of awareness of space, stream and speed when executing the turn, and the adverse effect that his decision to steer the vessel himself is likely to have had in this regard.
- 2. Recommendations for Fast Baltic (the operator of the vessel):
- a. The need for a helmsman to be employed so that master and pilot can effectively perform their duties concerning navigation and position

Responsibility for safe	If a marine incident occurs within a port, who is ultimately responsible: ship's master; pilot; or port/harbour authority and are any spatial constraints on vessel manoeuvring	is providing a response to assist the ExA. Section 16 (Liability for ships under compulsory pilotage) of the Pilotage	
NS.2.10	Examining Authority's Question	Although this question is directed at the applicant, MCA and DFDS, HMH	
		d. Undertaken to keep the site manned for the first four high tides following a mooring operation.	
		c. Invited Humber Estuary Services to inspect securing arrangements;	
		b. Submitted proposals to Humber Estuary Services on future securing arrangements;	
		a. Reviewed its procedures on mooring decommissioned vessels;	
		2. Acetech Construction took the following actions:	
		c. Undertaken to review the performance of VTS and the assets deployed so as to take forward any lessons from this accident;	
		b. Agreed on the feasibility of the proposals submitted by Acetech Construction Ltd and has inspected the site;	
		a. Reviewed its risk assessment on the hazards of mooring breakouts and, as a result, has introduced further control measures;	
		1. HES took the following actions:	
		January 2010 Fast Ann allides with IOT Jetty	
		b. The need for the master to be proactive in discussing any changes to the passage plan.	
		monitoring;	

navigation	a defence against culpability?	Act 1987 provides that:
navigation	a defence against cuipability:	"The fact that a ship is being navigated in an area and in circumstances in which pilotage is compulsory for it shall not affect any liability of the owner or master of the ship for any loss or damage caused by the ship or by the manner in which it is navigated."
NS.2.11 Closure of river due to a marine incident	Examining Authority's Question Under what circumstances it might it become necessary to wholly or partially close the river Humber to commercial shipping after an incident involving a tanker or pipeline infrastructure and what might be the duration and consequences of such closure?	HMH considers that it is difficult to envisage an incident that would require closure of the river for a significant period. The Humber has a number of channels and, if one is blocked, there are other ways into the river. Therefore, there are few single points of failure. A potential scenario when it could be necessary to close the Humber to commercial shipping would be a significant oil spill from a tanker or pipeline infrastructure. However, even in this scenario, HMH would not expect a total closure to be required over a prolonged period. A more likely scenario would be closure of part of the river. However, it is useful for HMH to set out what would occur if it were necessary to suspend commercial traffic within the Humber for a period of hours or days. Evidently, the duration of the closure would depend upon the nature and severity of the incident. A recent example is the prolonged period of bad weather in February 2018 ("the Beast from the East"). During that period, HES stopped taking pilot orders, but ships with pilot exemption certificates were able to continue moving if they could. If it were necessary to cease all traffic movements, this would be effected by HES, through VTS, refusing permission for vessels to enter, or move on, the Humber. This could be backed up, if necessary, by HMH issuing special directions to vessels

pursuant to section 7 of the British Transport Docks Act 1972. In this scenario, ships berthed at ports on the Humber would remain where they were. Vessels waiting outside the Humber would be held outside it until the river re-opened. HES would then manage the movements of all affected vessels following the re-opening of the river.

During ISH3, HMH explained how a major incident would be dealt with from the HES viewpoint. A summary of this is provided in the Written Summary of HMH's Oral Submissions [HMH13].

NS.2.29

Towage as embedded risk control for berthing and

unberthing

Examining Authority's Question

On the basis of the Applicant's [REP2-009] explanation that although towage would be one of the embedded risk controls, the provision of towage services should not and cannot be secured by a made DCO explain how the Immingham and Humber SHAs would each respond to ensure that the identified risks associated with berthing or unberthing at the Proposed Development would be controlled to ALARP in the event that suitable towage were to be unavailable to meet the demand.

The way that identified risks would be contained in the absence of suitable tug availability is that, if necessary, vessels would be held by HMH or the Dockmaster, as the case may be, until either the requisite number/size of tugs became available as were required for the particular conditions/vessel or the conditions improved so that fewer or no tugs were required. Under no circumstances would safety be for the compromised sake of commercial expediency.

For the avoidance of doubt, the tug requirements set as a result of the work to establish operating parameters for the IERRT would not be relaxed if tugs are unavailable for some reason.

There are currently 16 tugs in operation on the river but in busier times there have been more than 20. HMH would expect towage providers on the Humber to seek to take advantage of new port infrastructure by increasing capacity so as to service, and profit from, the forecast increased demand. In this regard, it is worth noting that there are two major tug providers in the Humber, so there is no operator with a monopoly. One company has an international fleet and

the other has a national fleet. Both companies are able to re-direct tugs from elsewhere in their fleet if it makes sense for them to do so.

Towage requirements will usually be prescribed by harbour directions and procedures that may vary according to and prevailing vessel the the conditions. Setting of these requirements is, and always has been, the responsibility of the statutory harbour authority (and competent harbour authority in respect of pilotage requirements) - there being a close relationship between the two. HMH is firmly of the view that it would be inappropriate and potentially counterproductive or even harmful to seek to stipulate towage requirements in the DCO.

NS. 2.31

Visibility restrictions on navigation as risk control

Examining Authority's Question

Respond to the IOT Operators' comments in REP3-026 relating to the references to visibility and harbour directions for Ro-Ro vessels as a risk control for the Proposed Development made by the Applicant in REP2-009 in answering ExQ NS.1.8

Although this question is directed at the applicant, HMH is providing a response to assist the ExA.

Section 6 of the British Transport Docks Act 1972 allows HES to make general directions for prohibiting entry into, or movement in, the Humber by vessels at times of poor visibility due to the weather or to the presence of dust or smoke.

The only blanket restrictions currently in place are defined as being for "vessels carrying Dangerous Cargoes in Bulk" and therefore do not capture Ro-Ro vessels, as is correctly stated.

While it is unlikely that a risk assessment would require a similar blanket restriction it is possible to restrict other vessels in specific circumstances, should it be deemed necessary.

In any event, any vessel may be aborted in fog by the Master, PEC or Pilot, particularly when working with tugs where the Tug Master may also abort the voyage.

NS.2.32

Examining Authority's Question

Use of tugs with Ro-Ro vessels

Comment on the concerns made by the IOT Operators in REP3-026 further to the Applicant's answer to ExQ NS.1.8 regarding the disadvantages or hazards inherent in using towage tugs with Ro-Ro vessels.

Although this question is directed at the applicant, HMH is providing a response to assist the ExA.

Harbour towage is an important activity as a risk control measure which itself has inherent risks. It is therefore important that the various operational risks are understood by Pilots, PECs and Towage Operators. This forms an important part of the training and authorisation of Pilots and PECs. There are also regular liaison meetinas between the authority and towage operators to ensure that risk assessments, safety management systems and operating procedures are both robust and complimentary of each other.

Towage assistance of Ro-Ro vessels in the tidal waters of the Humber is a well embedded operation and the challenges and potential problems are well understood and managed in operations already being carried out at a number of destinations on the Humber.

NS.2.33

Examining Authority's Question

Effects arising from contingency of lack of tug availability

typical would be the consequences if an additional tug was unavailable for a planned passage if a master during an "act of pilotage" for an arriving vessel (whether with a Humber pilot engaged or acting with the benefit of a Pilotage Exemption Certificate) determined dynamically that an additional tug would be required to make a safe manoeuvre at its commencement, having regard to the DFDS Written Representation [REP2-040] and the Harbour Master's answers to ExQ NS.1.14 [REP2-058] and NS.1.15 [REP2-059]?

Although this question is directed at the applicant, DFDS and Stena, HMH is providing a response to assist the ExA.

As set out in HMH's answer to question NS. 2.29 above. HES would not allow safety to be compromised. If it is determined that an additional tug is required but one is not available, then the vessel has to wait until either a tug becomes available, or conditions change such that the additional tug is not required. In practice, if the vessel's passage is effectively aborted, it will, depending on the circumstances, proceed to anchorage, back to sea or to a different berth. This occurs regularly at Immingham. IERRT would not be introducing a new or unusual risk on this issue.

As explained to the ExA by HMH during ISH3 (see HMH 13), such

		decisions are taken as early as possible. It is not unusual for a vessel coming up the river to decide it needs another tug or to abort a manoeuvre and go back to sea, if necessary. HMH repeats his observations at NS 2.29 above regarding availability of tugs.	
Current direction in the approach area to the Proposed Development Berths	In what way might a differential of 10 to 15 degrees in current direction between that simulated at the location of the Proposed Development berths and that identified by Interested Parties and the Harbour Master in the immediate vicinity of the Proposed Development affect towage requirements (at certain states of tide and wind) and the likelihood of and consequence of allision of a Ro-Ro vessel with a moored vessel or infrastructure at the Eastern Jetty or the adjacent tug barge?	The first point that HMH would like to make is that based on the further measurements carried out that there is currently no reason to believe such differential exists. The further checks and measurements carried out by HR Wallingford demonstrated to the satisfaction of HMH that the measurements used for the first simulations, in the area of the proposed IERRT jetty, were aligned so closely to the findings of the subsequent measurements as to make no material difference for the purposes of the simulations. In a situation where there was such a differential there may, depending on the location, be an increased or decreased risk of allision or collision. An increase would be dealt with by means of adaptive risk controls which could decrease operational flexibility, although this would depend to some extent on conditions and the vessel concerned. Reduction of risk to ALARP in these circumstances might well involve an increased requirement for tugs in benign conditions and tighter safe berthing windows, (such as berthing only in slacker tidal conditions). The safe operating parameters would be reduced, but	
NS.2.35	Examining Authority's Question	Although this question is directed at the applicant, HMH is providing a	
Differential current directions related to	Respond to the case made by DFDS in answering ExQ NS1.1.21 and NS.1.23 [REP2-037] that a difference in current direction between that measured at the location of the Proposed	response to assist the ExA. As has been set out in HMH's response to NS. 2.34 above, there is no such differential.	

validity of simulations

Development's berths and that existing differentially in the space between the end of the IOT river and the lock bellmouth undermines the validity of the simulations informing the assessment of levels of risk for the control of loss of vessels approaching or leaving the Proposed Development.

NS.2.40

Examining Authority's Question

Humber river commercial vessel capacity

In terms of daily shipping movements, what number of commercial shipping movements do you consider the Humber river can accommodate safely and efficiently, and how do mean and maximum shipping movements in 2023 to date compare with that capacity number?

There is no fixed maximum number of commercial shipping movements that can be accommodated on the Humber. Vessels can always be accommodated safety because there are a number of channels and vessels can be brought in and permitted to leave at different times.

In terms of total vessel numbers, there is plenty of spare capacity on the river itself and the introduction of new infrastructure, from time to time, increases berthing capacity. The Immingham Outer Harbour and Humber Sea Terminal are examples of developments that have increased capacity within the river in terms of infrastructure.

Row 3 of Table 1 (below) shows the daily commercial vessel movements subject to pilotage or pilotage exemption certification in 2003, as recorded by HES. This was a busy year within the past 20 years for which HES has records. The movements captured are both those in the wider Humber, based on records taken from HES's Port and Vessel Information Service ("PAVIS") as well as those being to and from an Immingham designated destination.

The 2003 figures can be compared with the equivalent movements in 2022 and 2023 to date (set out in rows 4 and 5. Unfortunately, the analysis tool required to interrogate daily maximums for Immingham is

unavailable for the 2003 data.

The table clearly demonstrates the capacity of the Humber to accommodate significantly more traffic than it does today, in a safe and sustainable manner.

In 2003 in the wider Humber there were a daily average of 86 movements with a maximum number of 116 movements. In 2023, year to date, the average number of movements over the same area is 58 per day with a recorded maximum of 78 movements.

HES's records also show that in 2003 there were an average of 35 movements per day to or from an Immingham destination compared with an average 29 movements per day (year to date) in 2023.

Table 1 – Commercial shipping movements in the Humber and Immingham				
Year	Average Humber/day	Maximum Humber/day	Average Immingham/day	Maximum Immingham/day
2003	86	116	35	Unavailable
2022	61	80	29	44
2023 to date (01.01.23 – 16.09.23)	58	78	29	42

Winckworth Sherwood LLP