Immingham Eastern Ro-Ro Terminal

Deadline 7 Appendices

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

Planning Inspectorate Ref: TR030007

11 December 2023

Burges Salmon

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IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

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IERRT – IOT Operators' preferred protective provisions and justification

Para	Amendments to protective provisions shown in REP1-039 and / or REP6-046	Other DCO example (if relevant)	Justification
1	For the protection of – (a) Associated Petroleum Terminals (Immingham) Ltd and Humber Oil Terminal Trustees Ltd (together the "IOT Operators"); and (b) Phillips 66 Limited and Prax Lindsey Oil Refinery Limited (together the "IOT Operators' Owners") the following provisions, unless otherwise agreed in writing at any time between the ~~Company~~undertaker and ~~Humber Oil Terminal Trustees Ltd~~the IOT Operators or the IOT Operators' Owners, have effect.	N/A	Protective Provisions should also protect Associated Petroleum Terminals (Immingham) Ltd as the operator of the IOT and oil depot on behalf of HOTT. The owners of the IOT Operators have been added to take the benefit of the indemnity provisions only. Any impact on the IOT itself would have a direct effect on the IOT Operators' Owners business, and it follows they should take the benefit of the indemnities. The Applicant is now referred to as the "undertaker" throughout to reflect the amendments to the DCO.
2	"acceptable insurance" means general third party liability insurance effected and maintained by the undertaker with a combined property damage and bodily injury limit of indemnity of not less than £50,000,000.00 (fifty million pounds) per occurrence or series of occurrences arising out of one event. Such insurance shall be maintained for the duration of the construction period of Work Nos. 1, 2 and 3, and after the construction period of Work Nos. 1, 2 and 3 in respect of any use and maintenance of such works by or on behalf of the undertaker and arranged with an insurer whose security/credit rating is not lower than: "A-" if the rating is assigned by Standard & Poor's Ratings Group or Fitch Ratings, and "A3" if the rating is assigned by Moody's Investors Services Inc., such insurance shall include (without limitation): (a) a waiver of subrogation and an indemnity to principal clause in favour of the IOT Operators. ~~(a)~~(b) pollution liability for third party property damage and third party bodily damage arising from any pollution/contamination event with a (sub)limit of indemnity of not less than £10,000,000.00 (ten million pounds) per occurrence or series of occurrences arising out of one	Third Party Liability of £50m per occurrence for construction period included in PPs in favour of National Grid and Cadent Gas Limited for the Southampton to London Pipeline Development Consent Order 2020.	A definition of acceptable insurance has been added as the undertaker should maintain an adequate level of insurance to address potential third party liabilities during the course of the construction and operation of the IERRT. This is a standard practice where new developments are proposed in close proximity to existing infrastructure, particularly where there is a risk of significant damage. The IOT Operators have no commercial interest in the operation of the IERRT. To avoid unacceptable detriment to its operations (as an operator of Critical National Infrastructure) it is essential that provisions of this nature are included. The IOT Operators' undertaking should not be materially prejudiced in the event that a DCO is to be granted, whether from the undertaker's construction or operation of the development.

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	event or £20,000,000.00 (twenty million pounds) in aggregate;		
2	"IOT Mitigation Measures" means the measures to be delivered by the undertaker in consultation with the IOT Operators to the reasonable satisfaction of the IOT Operators to ensure the safe use of the IOT and must include: (a) a modified IOT Finger Pier designed in consultation with the IOT Operators to enable two Coastal tankers of up to [max size to be added] to berth on the northern side of the finger pier and two barges of up to [max size to be added] to berth on the southern side of the finger pier in accordance with [Work No. X]; (b) completion of Work No. 3; ~~(c) the provision of a Marine Liaison Plan to minimise any conflict between the authorised development and the operations of the IOT,~~ unless otherwise agreed in writing between the undertaker and the IOT Operators. *** "Marine and Liaison Plan" means a plan for the construction and operational phases of the authorised development detailing the construction methodology and schedule of works for the authorised development and to manage procedural controls such as berth limits, towage requirements and operational deconfliction relating to the authorised development which is to be developed by the undertaker in consultation with the IOT Operators;	N/A	Definitions used in paragraph 5 of the IOT Operators' preferred protective provisions [**REP6-**046] have been added to provide the mitigation measures that the IOT Operators consider are necessary to make the IERRT acceptable. This is confirmed by the IOT's NRA. The definitions ensure that the measures should be delivered in consultation with and to the reasonable satisfaction of the IOT Operators. This also allows flexibility in terms of the finger pier being designed in consultation with the IOT Operators and enables the parties to agree a different approach in writing. Work numbers will need to be added/amended following change request. The definition for the Marine and Liaison Plan has been amended to clarify that Marine and Liaison Plan should cover both construction and operational phases of the IERRT. As canvassed in the IOT Operators' Deadline 7 submissions, the Applicant has failed to submit a change request which is capable of providing the necessary mitigation measures which are identified by the IOT Operators. The key deficiencies are inadequate impact protection and no re-location or modification of the IOT Finger Peir. If and only if the ExA / SoS are minded to grant the DCO in the absence of those measures being provided, the drafting in the first column of this row could be amended through the deletion of sub-paragraph (a). The remaining drafting would then operate to ensure that the impact protection being

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			offered by the Applicant (as Work No. 3 of its change request – see [**AS-052 and AS-048]**) is secured as part of that DCO.
2	"Phillips 66 Limited" means Phillips 66 Limited, company number 00529086 registered at 7th Floor, 200-202 Aldersgate Street, London EC1A 4HD, and any successor in title; "Prax Lindsey Oil Refinery Limited" means Prax Lindsey Oil Refinery Limited, company number 00564599 registered at Harvest House, Horizon Business Village, Weybridge KT13 0TJ, and any successor in title;	N/A	Definitions for the IOT Operators' Owners are inserted to take the benefit of the indemnity provisions as above. The IOT Operators' Owners have no commercial interest in the operation of the IERRT. To avoid unacceptable detriment to their operations (as operators of Critical National Infrastructure) it is essential that provisions of this nature are included. The IOT Operators' Owners' undertakings should not be materially prejudiced in the event that a DCO is to be granted, whether from the undertaker's construction or operation of the development.
2	"specified works" means any ~~work~~ of the authorised development or activities undertaken in association with the authorised development which will or may be situated on, over, under or within 5015 ~~15~~ metres measured in any direction of any apparatus, or (wherever situated) impose any load directly upon any apparatus or involve embankment works within 5015 ~~15~~ metres of any apparatus or may in any way adversely affect any apparatus.	A 50m distance was used in PPs for offshore cables in the Dogger Bank Teesside A and B Offshore Wind Farm Order 2015 Other amendments reflect typical wording in DCOs e.g. Network Rail PPs for the Awel y Môr Offshore Wind Farm Order 2023.	Definition of specified works has been amended to confirm what is meant by works and to ensure this captures any activities which may in any way adversely affect any of the IOT's apparatus. The area has also been expanded to 50m rather than 15m which is considered more appropriate in the offshore context.
3	**Acquisition of land and apparatus** (1) Irrespective of any provision in this Order or anything shown on the land plans or contained in the book of reference—	Several DCOs including PPs in favour of National Grid and SP Manweb in	Although the IOT Operators are concerned with offshore interactions, the PPs should ensure that acquisition of land or temporary possession of IOT

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	(a) the ~~Company~~undertaker must not acquire or take temporary possession of any land interest of the IOT Operators or –any apparatus or appropriate, acquire, extinguish, interfere with or override any easement or other interest of the IOT Operators or obstruct or render less convenient the access to any apparatus, otherwise than by agreement with ~~Humber Oil Terminal Trustees Ltd~~the IOT Operators; and (b) any right of ~~Humber Oil Terminal Trustees Ltd~~the IOT Operators to operate, maintain, repair, renew, adjust, alter or inspect any apparatus must not be extinguished by the ~~Company~~undertaker until any necessary alternative apparatus has been constructed and is in operation to the reasonable satisfaction of ~~Humber Oil Terminal Trustees Ltd.~~the IOT Operators.	the DCO for the Awel y Môr Offshore Wind Farm Order 2023.	land should only be with the agreement of the IOT Operators. This is considered a standard protective provision and should not be controversial. This protective provision has been offered by the Applicant in their first draft DCO.
4	**Retained apparatus** (1) Not less than 56 days before the commencement of any specified works, the undertaker must submit to the IOT Operators a plan. (2) The plan to be submitted to IOT Operators under sub-paragraph (1) must include a method statement and describe— (a) the exact position of the works; (b) the manner of their construction including details of excavation and positioning of plant; (c) the position of all apparatus; (d) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus; (e) any intended maintenance regimes; and (f) an assessment of risks of rise of earth issues. (3) The undertaker must not commence any specified works until the IOT Operators has given written approval of the plan so submitted.	Several DCOs including PPs in favour of National Grid in the DCO for the Awel y Môr Offshore Wind Farm Order 2023.	A new paragraph has been added in relation to the IOT's retained apparatus to ensure that details of works are provided for approval ahead of specified works being undertaken (i.e. within 50m / otherwise adversely affecting IOT). This enables the IOT to suggest any reasonable modifications and / or protective works necessary to ensure its assets are protected. There is also a provision to confirm that ABP should comply with HSE and COMAH guidance and regulations. This is a standard provision to included in many made DCOs in comparable circumstances.

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	(4) Any approval of the IOT Operators required under sub-paragraph (3) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5) or (7); (5) In relation to any specified works, the IOT Operators may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage or for the purpose of providing or securing proper and convenient means of access to any apparatus. (6) The specified works must only be executed in accordance with the plan submitted under sub-paragraph (1) as approved or as amended from time to time by agreement between the undertaker and the IOT Operators and in accordance with such reasonable requirements as may be made in accordance with the paragraph by the IOT Operators for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and the IOT Operators is entitled to watch and inspect the execution of those works. (7) Where under sub-paragraph (3) the IOT Operators requires any protective works to be carried out either by itself or by the undertaker (whether of a temporary or permanent nature) such protective works must be carried out to the IOT Operators' satisfaction prior to the commencement of any authorised development (or any relevant part thereof) for which protective works are required and the IOT Operators must give 56 days' notice of its requirement for such works from the date of submission of a plan in line with this paragraph (except in an emergency). (8) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of the authorised development, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan.		

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	(9) At all times when carrying out any part of the authorised development, the undertaker must comply with relevant guidance issued by the Health and Safety Executive and with the Control of Major Accident Hazards Regulations 2015.		
5	**Offshore Works** —(1) The undertaker must not, except with the agreement of the IOT Operators, carry out Work Nos. 1, 2 and 3, or any part of it. (2) Before ~~beginning to construct Work Nos. 1 and 2, or any part of it, the Company~~ any berths forming Work No. 1 are commissioned, the undertaker must— ~~(a)~~ deliver the IOT Mitigation Measures in consultation with the IOT Operators.; ~~(b) submit to the IOT Operators plans of Work Nos. 1 and 2 (or part of it) including sufficient detail to show that the jetty and berths will have adequate impact protection to sufficiently protect the IOT in the IOT Operators' reasonable opinion and such further particulars available to it as the IOT Operators may request within 21 days of receipt of the plans reasonably requested.~~ (3) Before beginning to construct Work Nos. 1, 2 and 3, or any part of it, the ~~Company~~undertaker must provide a Marine and Liaison Plan to minimise any conflict between the authorised development and the operations of the IOT and submit to the IOT Operators plans of Work Nos. 1, 2 and 3 (or part of it) including sufficient detail to show that the jetty, berths and impact protection works will provide adequate impact protection to sufficiently protect the IOT in the IOT Operators' reasonable opinion and such further particulars available to it as the IOT Operators may request within 21 days of receipt of the plans reasonably requested. (4) Work Nos. 1, 2 and 3 must not be constructed except in accordance with such plans as may be approved in writing by the IOT Operators.	These provisions are based on what was included in favour of National Grid in the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022 and the Awel y Môr Offshore Wind Farm Order 2023.	These provisions have been included to ensure that the mitigation measures required by the IOT Operators are delivered before the commissioning of any berth of the Proposed Development. The offshore works will only be able to be commenced with the agreement of the IOT Operators which will require the necessary mitigation measures to be delivered. These are essential to ensure that the IOT can continue to operate safely alongside the IERRT. The IOT Operators' approval cannot be unreasonably withheld or delayed by the IOT Operators which should give ABP comfort that approval will be provided once the mitigation measures are delivered to the reasonable satisfaction of the IOT Operators. There is provision for arbitration in the event of dispute. Work numbers reflect any works that include offshore works to the IERRT, impact protection works and finger pier works. 'shall' and 'will' have been amended to comply with drafting guidance (Advice Note 15).

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	(~~4~~5) Any approval of the IOT Operators required under this Schedule— (a) must not be unreasonably withheld or delayed; (b) in the case of refusal must be accompanied by a statement of grounds of refusal; and (c) may be given subject to such reasonable requirements as the IOT Operators may have in connection with the safe, economic and efficient use, operation and maintenance of the IOT or otherwise for the protection of any apparatus, provided always that in relation to a refusal under sub-paragraph (b) or any requirements requested pursuant to sub-paragraph (c) the ~~Company~~undertaker is permitted to refer such matters to arbitration pursuant to article [36]. (~~5~~6) The IOT Operators must employ reasonable endeavours to respond to the submission of any plans within a period of 56 days from the date of submission of the plans. If the IOT Operators require further particulars, such particulars must be requested by the IOT Operators no later than 21 days from the submission of plans and thereafter the IOT Operators must employ reasonable endeavours to respond to the submission within 56 days from receipt of the further particulars. (~~6~~7) The ~~Company~~undertaker must give to the IOT Operators not less than 14 days' notice in writing of its intention to commence construction of any part of Work Nos. 1, 2 and 3 and notice in writing of its completion not later than 7 days after the date on which it is completed and the IOT Operators will be entitled by its officer to watch and inspect the construction of such works. (~~7~~8) If any part of Work Nos. 1, 2 and 3 or the IOT Mitigation Measures is constructed otherwise than in accordance with this Part of this Schedule the IOT Operators may by notice in writing identify the extent to which the works do not comply with the		

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	approved details or otherwise with this Part of this Schedule and request the ~~Company~~undertaker at the ~~Company~~undertaker's own expense carry out remedial works so as to comply with the requirements of this Part of this Schedule or such alternative works as may be agreed with the IOT Operators or as otherwise may be agreed between the parties. (~~8~~9) Subject to sub-paragraph (~~9~~10), if within a reasonable period, being not less than 28 days beginning with the date when a notice under sub-paragraph (~~7~~8) is served upon the ~~Company~~undertaker, the ~~Company~~undertaker has failed to begin taking steps to comply with the requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the IOT Operators may execute the works specified in the notice and any reasonable expenditure incurred by the IOT Operators in so doing will be recoverable from the ~~Company~~undertaker. (~~9~~10) In the event of any dispute as to whether sub-paragraph (~~7~~8) is properly applicable to any work in respect of which notice has been served under that sub-paragraph, or as to the reasonableness of any requirement of such a notice, the IOT Operators ~~will~~must not, except in the case of an emergency, exercise the powers conferred by sub-paragraph (~~8~~9) until the dispute has been finally determined in accordance with article [36] (arbitration).		
6	**Operation of Offshore Works** The IOT Operators' agreement under paragraph [5(1)] of this Part of this Schedule may be made subject to requirements in relation to the construction or operational phases of the authorised development to ensure that the IOT Operators do not suffer more interference than is reasonably practicable and may require reasonable commitments by the undertaker to ensure that vessels and tankers using the IOT are given priority over vessels using the authorised development.	PPs in favour of the Humber Conservancy in the Able Marine Energy Park Development Consent Order 2014 refers to the Agency's functions not suffering more interference than is reasonably practicable.	This provision has been added to clarify that the agreement of the IOT Operators can include reasonable requirements to ensure that the IOT Operators do not suffer more interference than is reasonably practicable. It also mentions that it could requirement reasonable commitments to be made to ensure IOT vessels are granted priority on the basis that they are dependant on tidal consideration.

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			Priority for IOT vessels has been expressly offered by the Applicant and confirmed by the Harbour Master Humber in Issue Specific Hearing 6 (Line 672 of the ISH6 Part 2 Transcript [**EV11-005**]). The IOT Operators have not been offered an explanation as to why this provision is not acceptable to the Applicant, in light of that commitment.
7	**Expenses** Save where otherwise agreed in writing between the IOT Operators and the undertaker and subject to the following provisions of this paragraph, the ~~Company~~undertaker must pay to ~~Humber Oil Terminal Trustees Ltd~~the IOT Operators within 30 days of receipt of an itemised invoice or claim from the IOT Operators all charges, ~~the reasonable~~ costs and expenses reasonably incurred by ~~Humber Oil Terminal Trustees Ltd~~the IOT Operators in, or in connection with the inspection, removal, relaying or replacing, alteration or protection of any apparatus or the construction of any new apparatus or alternative apparatus which may be required in consequence of the execution of any such works as are referred to in this Part including without limitation— (a) any costs reasonably incurred by or compensation properly paid by the IOT Operators in connection with the acquisition of rights or the exercise of statutory powers for such apparatus; (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus, where no written diversion agreement is otherwise in place; (c) the making safe of redundant apparatus; (d) the approval of plans; (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works; and (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary	These provisions are similar to those included in several DCOs including those in favour of National Grid in the Awel y Môr Offshore Wind Farm Order 2023 and the A428 Black Cat to Caxton Gibbet Development Consent Order 2022 and in favour of Northern Powergrid in the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022.	Additional provisions added in relation to expenses to confirm what can be recovered by the IOT Operators. These are considered to be standard PPs.

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	works reasonably necessary in consequence of the execution of any such works referred to in this Part. ~~the inspection, removal, alteration or protection of any apparatus; or the watching and inspecting the execution of any specified work; or imposing reasonable requirements for the protection or alteration of apparatus,~~ ~~which may reasonably be required in consequence of the execution of any such works as are required under this Schedule.~~		
8	**Damage to property ~~and other losses~~** (1) ~~Subject to the following provisions of this paragraph, the~~The ~~Company~~undertaker must ~~—~~permit ~~Humber Oil Terminal Trustees Ltd~~ the IOT Operators access to any apparatus during the carrying out of any ~~relevant~~ specified works reasonably required for the purposes of inspection, maintenance and repair of such apparatus and upon reasonable notice. ~~For the purposes of this subparagraph (a), 'apparatus' includes any connection into pipelines or associated infrastructure operated by Humber Oil Terminal Trustees Ltd and/or any successor pipeline system operator.~~ ~~pay Humber Oil Terminal Trustees Ltd for all loss, damage, liability, costs and expenses reasonably suffered or incurred by Humber Oil Terminal Trustees Ltd for which Humber Oil Terminal Trustees Ltd is legally liable as a result of legally sustainable claims brought against Humber Oil Terminal Trustees Ltd by any third party solely arising out of the carrying out of any relevant works;~~ ~~pay the cost reasonably incurred by Humber Oil Terminal Trustees Ltd in making good any damage to any apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal or abandonment) arising from or caused by the carrying out of any relevant works.~~ ~~pay the cost reasonably incurred by Humber Oil Terminal Trustees Ltd in stopping, suspending and restoring the supply through its pipeline and make reasonable compensation to Humber Oil Terminal~~	N/A	This provision enables the IOT Operators to access any apparatus during specified works upon providing reasonable notice. The additional wording has been removed in favour of the expenses and indemnity clauses which are considered standard and clearer.

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	~~Trustees Ltd for any other expenses, losses, damages, penalty or costs incurred by Humber Oil Terminal Trustees Ltd by reason or in consequence of any such damage or interruption provided that the same arises in consequence of the carrying out of any relevant works.~~ ~~Irrespective of anything to the contrary elsewhere in this Part of this Schedule—~~ ~~the Company and Humber Oil Terminal Trustees Ltd must at all times take reasonable steps to prevent and mitigate any loss, damage, liability, claim, cost or expense (whether indemnified or not) which either suffers as a result of the other's negligence or breach of this Part of this Schedule; and~~ ~~neither the Company nor Humber Oil Terminal Trustees Ltd are liable for any loss, damage, liability, claim, cost or expense suffered or incurred by the other to the extent that the same are incurred as a result of or in connection with the sole, partial or complete breach of this Part of this Schedule or negligence arising out of an act, omission, default or works of the other, its officers, servants, contractors or agents.~~ ~~Humber Oil Terminal Trustees Ltd must give to the Company reasonable notice of any claim or demand to which this paragraph 38 applies. The Company may at its own expense conduct all negotiations for the settlement of the same and any litigation that may arise therefrom. Humber Oil Terminal Trustees Ltd must not compromise or settle any such claim or make any admission which might be prejudicial to the claim. Humber Oil Terminal Trustees Ltd must, at the request of the Company, afford all reasonable assistance for the purpose of contesting any such claim or action, and is entitled to be repaid all reasonable expenses incurred in so doing.~~ ~~(4) In this paragraph—~~ ~~"relevant works" means such of the authorised development as—~~		

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	~~(a) does, will or is likely to affect any apparatus; or~~ ~~(b) involves a physical connection or attachment to any apparatus.~~		
9	**Indemnity** (1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any works authorised by this Part or in consequence of the construction, use, maintenance or failure of any of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by it) in the course of carrying out such works (including without limitation works carried out by the undertaker under this Part or any subsidence resulting from any of these works), any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purpose of those works) or property of the IOT Operators, or there is any interruption in any service provided by the IOT Operators, or the IOT Operators or the IOT Operators' Owners becomes liable to pay any amount to any third party, the undertaker must— (a) bear and pay on demand accompanied by an invoice or claim from the IOT Operators or the IOT Operators' Owners the cost reasonably and properly incurred by the IOT Operators or the IOT Operators' Owners in making good such damage or restoring the supply; and (b) indemnify the IOT Operators or the IOT Operators' Owners for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from the IOT Operators or the IOT Operators' Owners, by reason or in consequence of any such damage or interruption or the IOT Operators or the IOT Operators' Owners becoming liable to any third party as aforesaid other than arising from any default by the IOT Operators.	See for example PPs in favour of National Grid in the Awel y Môr Offshore Wind Farm Order 2023, PPs in favour of National Grid and the Canal and River Trust in the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022, and PPs in favour of the Humber Conservancy in the Able Marine Energy Park Development Consent Order 2014. Indemnities of this sort can be found in virtually any recently made DCO which includes protective provisions for the benefit of proximate infrastructure.	An indemnity clause has been added as is standard practice where new developments are proposed in close proximity to existing infrastructure under active use. This ensures that the IOT Operators and the IOT Operators' Owners will be indemnified for any losses suffered as a result of the IERRT. Any impact on the IOT itself would have a direct effect on the IOT Operators' Owners business, and it follows they should also take the benefit of the indemnities. The IOT Operators and their Owners have no commercial interest in the operation of the IERRT. To avoid unacceptable detriment to their operations (as operators of Critical National Infrastructure) it is essential that provisions of this nature are included. The IOT Operators' (or their Owners') undertaking should not be materially prejudiced in the event that a DCO is to be granted, whether from the undertaker's construction or operation of the development.

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	(2) The fact that any act or thing may have been done by the IOT Operators on behalf of the undertaker or in accordance with a plan approved by the IOT Operators or in accordance with any requirement of the IOT Operators as a consequence of the authorised development or under its supervision does not (unless sub-paragraph (3) applies) excuse the undertaker from liability under the provisions of sub-paragraph (1) unless the IOT Operators fails to carry out and execute the works properly with due care and attention and in a skilful and workmanlike manner or in a manner that does not materially accord with the approved plan or as otherwise agreed between the undertaker and the IOT Operators. (3) Nothing in sub-paragraph (1) will impose any liability on the undertaker in respect of— (a) any damage or interruption to the extent that it is attributable to the neglect or default of the IOT Operators, its officers, employees, contractors or agents; and (b) any authorised development or any other works authorised by this Part carried out by the IOT Operators as an assignee, transferee or lessee of the undertaker with the benefit of this Order pursuant to section 156 of the 2008 Act or article [8] (benefit of the Order) subject to the proviso that once such works become apparatus ("new apparatus") any works yet to be executed and not falling within this sub-paragraph (b) are subject to the full terms of this Part including this paragraph in respect of such new apparatus. (4) The IOT Operators and the IOT Operators' Owners must give the undertaker reasonable notice of any claim or demand and no settlement, admission of liability or compromise or demand must be made, unless payment is required in connection with a statutory compensation scheme, without first consulting the undertaker and considering its representations. (5) The IOT Operators and the IOT Operators' Owners must, in respect of any matter covered by the indemnity given by the		

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	undertaker in this paragraph, at all times act reasonably and in the same manner as it would as if settling third party claims on its own behalf from its own funds. (6) The undertaker shall not carry out Work Nos. 1, 2 and 3, or any part of such works, unless and until the IOT Operators are satisfied acting reasonably that the undertaker has procured acceptable insurance and the IOT Operators have confirmed the same in writing to the undertaker.		
10	**Co-operation and reasonableness** (1) Where in consequence of the proposed construction of any of the authorised development, the ~~Company~~ undertaker requires the removal of apparatus under this Part of this Schedule or the IOT Operators makes requirements for the protection or alteration of apparatus under this Part of this Schedule, the ~~Company~~ undertaker must use its best endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised development and taking into account the need to ensure the safe and efficient operation of the IOT Operators' undertaking and the IOT Operators must use its best endeavours to cooperate with the ~~Company~~ undertaker for that purpose. (2) the ~~Company~~ undertaker and the IOT Operators must act reasonably in respect of any given term of this Part of this Schedule and, in particular, (without prejudice to generality) where any consent or expression of satisfaction is required by this Part of this Schedule it must not be unreasonably withheld or delayed.	N/A	There are no material changes proposed to these provisions.
11	**Miscellaneous** Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the ~~Company~~ undertaker and the IOT Operators in respect of any apparatus laid or erected in land belonging to the ~~Company~~ undertaker on the date on which this Order is made provided that the terms of the relevant enactment or agreement are not	N/A	There are no material changes proposed to these provisions.

IERRT – IOT Operators' preferred protective provisions and justification

Para	Amendments to protective provisions shown in REP1-039 and / or REP6-046	Other DCO example (if relevant)	Justification
	inconsistent with the provisions of this Order, including this Part of this Schedule. In the case of any inconsistency, the provisions of this Order, including this Part of this Schedule, prevail.		
12	**Emergency circumstances** (1) The ~~Company~~ undertaker acknowledges that the IOT Operators provides services to His Majesty's Government, using its apparatus, which may affect any works to be carried under this Order. (2) In the following circumstances, the IOT Operators may on written notice to the ~~Company~~ undertaker immediately suspend all works that necessitate the stopping or suspending of the supply of product through any apparatus under this Order and the IOT Operators ~~shall~~ are not ~~be~~ in breach of its obligations to proceed: (a) circumstances in which, in the determination of the Secretary of State, there subsists a material threat to national security, or a threat or state of hostility or war or other crisis or national emergency (whether or not involving hostility or war); or (b) circumstances in which a request has been received, and a decision to act upon such request has been taken, by His Majesty''s Government for assistance in relation to the occurrence or anticipated occurrence of a major accident, crisis or natural disaster; or (c) circumstances in which a request has been received from or on behalf of NATO, the EU, the UN, the International Energy Agency (or any successor agency thereof) or the government of any other state for support or assistance pursuant to the United Kingdom's international obligations and a decision to act upon such request has been taken by His Majesty's Government or the Secretary of State; or (d) any circumstances identified as such by the COBRA committee of His Majesty's Government (or any successor committee thereof); or	N/A	There are no material changes proposed to these provisions.

IERRT – IOT Operators' preferred protective provisions and justification

Para	Amendments to protective provisions shown in REP1-039 and / or REP6-046	Other DCO example (if relevant)	Justification
	(e) any situation, including where the United Kingdom is engaged in any planned or unplanned military operations within the United Kingdom or overseas, in connection with which the Secretary of State requires fuel capacity. (3) The parties agree to act in good faith and in all reasonableness to agree any revisions to any schedule, programme or costs estimate (which ~~shall~~ includes costs of demobilising and remobilising any workforce, and any costs to protect the IOT Operators' apparatus "mid-works") to account for the suspension. (4) The IOT Operators are~~shall~~ not ~~be~~ liable for any costs, expenses, losses or liabilities the ~~Company~~ undertaker incurs as a result of the suspension of any activities under this paragraph or delays caused by it.		

Immingham Eastern Ro-Ro Terminal

Deadline 7 Appendix 2

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
IOT Operators, Letter to ABP, RE: further enquiries including design parameters, vessel impact protection and SOCG - Attachment 1: Beckett Rankine, Memo, Design Basis Review - Attachment 2: IOT Operators draft SOCG

QUEENS ROAD
IMMINGHAM
N E LINCOLNSHIRE
DN40 2PN

TEL.: (01469) 570300
FAX: (01469) 570321

Date: 4 December 2023
Ref: APT
For the attention of immroro@abports.co.uk

Dear Associated British Ports

IMMINGHAM EASTERN RO-RO TERMINAL DEVELOPMENT

1 INTRODUCTION

1.1 We write with reference to Associated British Ports' ("**ABP**") application for the proposed Immingham Eastern Ro-Ro Terminal Development ("**IERRT**") and to the ongoing DCO Examination. As you are aware, we act for Associated Petroleum Terminals (Immingham) Limited and Humber Oil Terminals Trustee Limited (together the "**IOT Operators**").

1.2 Where relevant we have referred to document references from the IERRT DCO Examination Library.

2 OUTSTANDING QUERIES

2.1 There are a number of matters on which the parties have been corresponding in relation to the IERRT application, many of which were referred to in issue specific hearings during the week of 20 November. The IOT Operators have a series of outstanding questions that we wished to bring to your attention. Those are:

2.2 **Design parameters of the IERRT infrastructure and / or ABP's proposed Vessel Impact Protection**

2.3 As part of its change notification [AS-027], ABP has indicated that it intends to provide:

(a) An increase in number and repositioning of piles supporting the IERRT marine infrastructure (Change 1); and

(b) Additional impact protection measures (Change 4).

2.4 In correspondence dated 10 November 2023[1], ABP were asked:

1. Can the IERRT infrastructure withstand impact by an IERRT vessel (either Stena T Class 21,451t displacement or IERRT Design Vessels 48,431t displacement) at 2.5 knots? Please provide evidence of calculations used to demonstrate this.

2.5 In response to that request ABP has provided a document (on 15 November) entitled "IOT Vessel Impact Protection Structures – Design Basis".

2.6 Appended to this letter is a memo entitled "Design Basis Review" prepared by Beckett Rankine – expert marine consulting engineers – which identifies a series of omissions or further queries which emerge from the information provided by ABP.

2.7 We would be grateful if you could provide a complete response to that "Design Basis Review" to enable the IOT Operators to comment on ABP's proposed change request at Deadline 7 (11 December). We would therefore ask for a response by no later than Wednesday 6 December.

2.8 **Details of simulations carried out for ABP on 15 / 17 November**

2.9 ABP referred in hearings to further simulations carried out on its behalf by HR Wallingford on 15 and 17 November. In respect of those simulations, the IOT Operators ask to be provided with:

(a) Full information concerning the programme and parameters for the simulations. It is expected that information was prepared in advance of the simulations to reflect the approach taken to the simulations of the 6 / 7 November[2]. Whilst IOT Operators were unable to attend the simulations of 15 / 17 November, no written information was provided in advance of the call attended on 13 November which has been referred to by ABP as a "briefing call[3]".

(b) A report showing the outcome of the simulations.

2.10 Given that these simulations were carried out over two weeks ago, it is assumed this information is available and should be provided immediately by return.

2.11 Flow modelling information

2.12 The IOT Operators raised during the issue specific hearings that the simulations carried out to date by ABP have been premised on incomplete / obsolete information concerning the impact of the IERRT

[1] Labelled "without prejudice", but in respect of which the parties have subsequently agreed to waive that privilege.

[2] We refer here to the ABP letter of 20 October detailing environmental conditions, design vessel, manoeuvring policy and procedures and the proposed run matrix, amongst other details.

[3] IOT Operators do not agree to that label.

facility and any berthed IERRT RoRo vessels, on flows that could affect IOT Finger Pier operations (including IOT vessels arriving, departing, and transferring cargo).

2.13 In the absence of any detailed information being provided to date, and due to the complexities of the tidal regime in the area and the blockages brought about by the IERRT pontoons and vessels, the IOT Operators consider that a detailed assessment (for example using computational fluid dynamics) is necessary to accurately model those changes to flow, which can then be used for forthcoming simulations and any operations assessments.

2.14 ABP are therefore asked to indicate when it intends to provide any flow assessment to the IOT Operators.

3 STATEMENT OF COMMON GROUND

3.1 A copy of an amended Statement of Common Ground was provided to the IOT Operators on Friday 10 November. An amended version showing IOT Operators' proposed changes to that document is attached.

4 PROTECTIVE PROVISIONS

4.1 Amended protective provisions have been provided on behalf of ABP on Wednesday 29 November[4]. The IOT Operators are disappointed that ABP has resiled from the position detailed in its letter of 28 September to the Examining Authority, without any notice to or prior engagement with the IOT Operators. The IOT Operators will address their significant concerns with the draft provisions which are proposed by ABP directly to the Examining Authority.

We await your response to the requests detailed in this letter.

Yours faithfully

Matt Dearnley
Terminal Manager

ASSOCIATED PETROLEUM TERMINALS (IMMINGHAM) LIMITED

[4] Despite the express commitment to provide those to IOT Operators on Monday 27 November during ISH6 on 23 November.

CONTROLLED DOCUMENT STATUS

CLIENT	NASH Maritime
PROJECT TITLE	Immingham Ro-Ro Terminal Impact Protection
SUBJECT	Impact Protection
DOCUMENT TITLE	Design Basis Review
DOCUMENT REF	2333-BRL-01-XX-MM-C-0001

REVISION RECORD

REV	STATUS	DATE	SUMMARY OF CHANGES	PREP	CHK	APP
P01	S2 – For Information	27/11/2023	-	GT	TKHB	TKHB

1 REVIEW OF IERRT IMPACT ASSESSMENT DESIGN BASIS DOCUMENT

1.1 Background

1.1.1 Associated British Ports (ABP) have prepared a Design Basis document (doc ref: 4021009-JAC-ZZ-01-TN-C-00001) for the proposed impact protection measures as part of the IERRT development.

1.1.2 Beckett Rankine (BR) have been appointed by NASH Maritime to review the Design Basis on behalf of the Immingham Oil Terminal (IOT).

1.1.3 This memo summarises BRs comments on the Design Basis documents and provides recommendations for additional information to be included within this document for the IOT.

1.1.4 Section 1.2 provides general comments on notes on assumptions stated within the design basis document.

1.1.5 Section 1.3 provides a list of further information that is requested to be included in the design basis document.

1.2 Beckett Rankine Comments

1.2.1 The future vessel impact velocity is 1.8knots, as opposed to 2.5knots for all other vessels. It's not clear how this has been determined and there is no justification within the document as to why the velocity is reduced for the future vessels.

1.2.2 There is no explanation of the possible modes of impact with the IOT structures and/or the protection structures. Likely impact scenarios should be set out so that the designer of the protection structures understands the possible angles of approach of the impacting vessel.

1.2.3 It is unclear how the 5m offset of the protection measures to the IOT structures has been assessed to be a safe offset distance. The document contains no assessment of whether 5m clearance is sufficient to prevent contact with the IOT

structures taking account vessel overhangs and deflection of the impact protection structure under load.

1.2.4 The design basis document doesn't clarify what impact the IERRT pontoons and associated restraint dolphins are designed for, and if these are designed to fail upon impact or will remain serviceable. There is a reference to a performance specification (doc ref: 4021009-JAC_ZZ-01-SP-C-00017) but this document has not been made available to the IOT team for review.

1.2.5 To note, the design basis states that there is no lighting to be provided on the protection structures. This should be reviewed for safety navigational reasons by the IOT team.

1.2.6 Also, to note, there is no allowance for access between IOT structures and the impact structures.

1.3 Design Basis Further Information Request

1.3.1 The design impact force is not provided.

1.3.2 There is no information about the assumed ground conditions.

1.3.3 There is no information about the pile sizes or whether raking piles are proposed (which could extend below the IOT jetty).

1.3.4 There is no information about the fenders proposed.

1.3.5 There is no information what corrosion protection system is assumed.

1.3.6 There is no information on any maintenance requirements of the impact assessment structures.

1.3.7 There is no information on whether the impact protection structures are designed to withstand environmental loads, and if so, what these are.

1.3.8 No design calculations have been provided within the design basis to justify the size of the impact structures, the degree of deflection under impact and whether the proposed general arrangement is viable. These details should be provided to allow IOT team to better understand the suitability and mechanism of the impact protection system to protect the IOT infrastructure.

KEEPING BRITAIN TRADING

Style Definition: Heading 3

IMMINGHAM EASTERN RO-RO TERMINAL

STATEMENT OF COMMON GROUND BETWEEN ASSOCIATED BRITISH PORTS AND ASSOCIATED PERTROLEUM TERMINALS (IMMINGHAM) LIMITED AND HUMBER OIL TERMINALS TRUSTEE LIMITED

Document Reference 7.12

PINS Reference – TR030007 2023

Document Information

Document Information		
Project	Immingham Eastern Ro-Ro Terminal	
Document Title	Statement of Common Ground between Associated British Ports and Associated Petroleum Terminals (Immingham) Limited and Humber Oil Terminals Trustees Limited	
Commissioned by	Associated British Ports	
Document ref	7.12	
Prepared by	IERRT Project Team	
Date	**Version**	**Revision Details**
11/2023	Draft	

Contents

1 Section 1 – Introduction

Overview

1.1 This Statement of Common Ground ("SoCG") has been prepared in connection with the application (the "Application") by Associated British Ports ("ABP"), made under the provisions of Section 37 of the Planning Act 2008 ("the PA 2008"), for a Development Consent Order ("DCO"). If approved, the DCO will authorise the construction and operation of the Immingham Eastern Ro-Ro Terminal ("IERRT") within the existing Port of Immingham.

1.2 The IERRT development as proposed by ABP falls within the definition of a Nationally Significant Infrastructure Project ("NSIP") as set out in sections 14(1)(j), 24(2) and 24(3)(b) of the PA 2008.

The Project

1.3 In summary, the IERRT development comprises two principal elements:

(a) on the marine side, the construction of a new three berth Roll-on/Roll-off harbour facility and related marine infrastructure; and

(b) on the landside, the provision of a suitably surfaced area to accommodate a terminal building and ancillary buildings together with storage and waiting space for the embarkation and disembarkation of the vessel borne wheeled cargo.

1.4 The landside development will also include, within the Order Limits – i.e., within the boundary of the development site – a building for the UK Border Force together with an area for disembarked traffic awaiting UK Border Force checks prior to departure from the Port.

1.5 ABP will be providing an area of off-site environmental enhancement at Long Wood, which is located close to the Port of Immingham's East Gate.

Parties to this Statement of Common Ground

1.6 This SoCG has been prepared by:

(a) ABP – the promoter of the IERRT development and the owner and operator of the Port of Immingham; and

(b) Associated Petroleum Terminals (Immingham) Limited ("APT") and Humber Oil Terminals Trustee Limited ("HOTT") and together the "IOT Operators". HOTT is the licensee of the Immingham Oil Terminal Jetty and lessee of the associated oil terminal and tank farm. APT Operates the Immingham Oil Terminal and the associated oil depot on behalf of HOTT.

1.7 In this SoCG ABP and the IOT Operators are collectively referred to as "the Parties".

The Purpose and Structure of this Document

1.8 The purpose of this SoCG is to identify and summarise any agreement, disagreement or matters outstanding between the parties on matters relevant to the examination so as to assist the Examining Authority in its consideration of the Application.

1.9 In preparing the SoCG, full account has been taken of the guidance provided in 'Planning Act 2008: examination of application for development consent' (Department for Communities and Local Government (as it then was), March 2015). In addition, due regard to the ExA procedural decision of 26 May 2023 and the subsequent PAD Summary Statement submitted to the examination by IOT Operators on 6 July 2023.

1.10 Section 1 of the SoCG is designed to act as a general introduction to the IERRT project and to the parties concerned.

1.11 Section 2 of the SoCG sets out a summary of the correspondence and engagement between the parties to date.

1.12 Section 3 of the SoCG sets out the matters which have been agreed or which remain outstanding, together with any matters upon which it has not been possible to reach agreement.

1.13 The table in Section 3 uses a colour coding system to indicate the status of the matters between the Parties as follows:

(a) Green – matter agreed;

(b) Orange – matter ongoing; and

(c) Red – matter not yet agreed.

2 Section 2 – Summary of Engagement

2.1 A summary of the consultation and engagement between ABP and the IOT Operators up to the date of this SoCG in relation to the IERRT project generally and concerning the matters raised in this SoCG specifically is presented in Table 2.1 below. Table 2.1 does not, however, record without prejudice meetings and correspondence.

2.2 It is agreed by the Parties to this SoCG that Table 2.1 is an accurate record of the correspondence between the Parties, save for where engagement (in the form of correspondence and meetings) took place on a without prejudice basis.

Table 2.1 – Summary of Engagement

Date	Form of Correspondence	Summary with key outcomes and points of discussion
20.07.21	Email	ABP advised APT of project.
06.08.21	Email	ABP provided briefing note and indicative plan proposal sent across.
10.08.21	Email	APT requested a drawing of the IOT finger pier.
11.08.21	Email	ABP confirmed they would provide the drawing.
13.09.21	Email	APT followed up on request for drawing of finger pier and timescale for consultation process.
13.09.21	Email	ABP noted requests and confirmed that they would like to discuss APT's pipeline/water main.
14.09.21 & 15.09.21	Email	ABP and APT discussed arrangements for meeting on 21.09.21.
21.09.21	Meeting	ABP provided APT with project update.
22.09.21	Email	ABP provided notification of proposal being with the Planning Inspectorate.
28.09.21	Email	APT confirmed they still required finger pier drawing.
19.01.22	Email	ABP issued APT notification of the start of the Statutory Consultation.
19.01.22	Email	ABP issued HOTT notification of the start of the Statutory Consultation.

22.02.22	Email	APT issued S.42 Consultation Response.
17.03.22	Email	ABP advised APT that the EA are undertaking works to Harborough Marsh Pointing Doors.
17.03.22 - 25.04.22	Email	APT and ABP discussed works to Harborough Marsh Pointing Doors.
24.03.22	Email	ABP issued invitation to Hazid Workshop on 07.04.22.
24.03.22	Email	APT confirmed they would like to attend.
28.03.22	Meeting	APT and ABP discussed use and location of sinker buoy.
29.03.22	Email	ABP outlined discussions from meeting regarding sinker buoy.
04.04.22	Email	APT requested clarification on the purpose of the workshop and identified specific pre-read material be issued in advance.
04.04.22	Email	ABP clarified the purpose of the workshop provided pre-read material.
04.04.22	Email	ABP issued invitation to Hazid Workshop and discussed sinker buoy.
05.04.22	Email	APT agreed to relocation if new location doesn't detrimentally affect APT and that ABP agree to pay associated costs.
05.04.22	Email	ABP confirmed the buoy to be relocated and agreed to revert with responses on costs.
07.04.22	Email	ABP confirmed agreement and asked if APT would like to propose a new location for buoy.
07.04.22 & 08.04.22	Email	APT provided new location for buoy.
14.04.22	Email	ABP provided a drawing showing new location and requested confirmation from APT that this was acceptable.

14.04.22	Email	APT confirmed location is ok and for ABP to proceed with paperwork.
14.04.22	Email	ABP agreed to progress matters.
19.04.22	Email	ABP issued updated NRA for comment.
25.04.22	Email	APT confirmed legal contact and that they will send draft licence to them.
26.04.22	Email	ABP proposed a meeting to discuss outstanding issues.
26.04.22	Email	APT requested further information on the purpose of the meeting and suggested w/c 9th or 16th.
28.04.22 & 29.04.22	Email	ABP confirmed the meeting would cover project update, Nav Sims, HSE response, construction programme, marine GI timescales, East Dock Road utilisation and protective provisions.
29.04.22	Email	APT provided further comments following S.42 Consultation Response and feedback on HazId workshop.
06.05.22	Email	ABP and APT arranged meeting for 16.05.22.
13.05.22	Email	ABP responded to APT letter regarding NRA, simulations and traffic comments.
13.05.22	Email	APT outlined further issues to discuss at upcoming meeting on 16.05.22 including NRA methodology, scheme design, scoring and supporting data.
16.05.22	Meeting	ABP and APT discussed project update and issues raised during consultation and ongoing engagement including NRA methodology, mitigation and protection of finger pier, landside and marine congestion.
19.05.22 - 24.05.22	Email	ABP and APT arranged meeting and discussed agenda.
20.05.22	Email	ABP issued invitation to Hazid Workshop on 7th & 8th June.

25.05.22	Meeting	ABP and APT discussed NRA methodology, scheme design, navigational concerns and mitigation, Hazid workshop lll and ongoing engagement.
27.05.22	Email	APT (and Nash Maritime) issued notes from meeting on 25.05.22.
27.05.22	Email	ABP advised of the postponement of Hazid Workshop on 7th & 8th June.
30.05.22	Email	ABP responded to meeting notes.
01.06.22	Email	ABP provided notes from meeting on 16.05.22 and the Draft Protective Provisions.
06.06.22	Email	APT confirmed receipt of meeting notes and Draft Protective Provisions.
10.06.22	Email	APT requested a call to discuss ABP comments on meeting notes.
13.06.22	Email	ABP agreed to a call and confirmed they were unclear on terminology.
17.06.22	Email	APT sent through revised meeting notes and requested comments on 'Post Meeting Note'.
29.06.22	Email	ABP sent a new draft licence for relocation of the sinker buoy.
29.06.22	Email	APT followed up on email sent on 17.06.22 regarding meeting notes.
30.06.22	Email	ABP provided comments on meeting notes.
30.06.22	Email	APT legal adviser confirmed receipt of draft licence and advised they would take instructions and revert.
06.07.22	Email	APT queried the proposed changes to meeting notes and revised draft provided.
13.07.22	Email	ABP requested any comments on the draft protective provisions that were sent through.
22.07.22	Email	APT confirmed they would come back on the protective provisions

25.07.22	Email	APT confirmed outstanding queries relating to mitigation measures, information from Hazid workshop lll, data provision and simulation.
02.08.22	Email	ABP responded to issues raised in APT letter dated 25.07.22 including relocation of finger pier, vessel impact protection, marine liaison plan, alternative access of LaPorte road, Hazid workshops, data provision and simulation.
02.08.22, 03.08.22 & 05.08.22	Emails	ABP issued Pre-read material for Hazid workshop (multiple emails).
11.08.22	Email	APT sent checklist of information requested to support risk assessment workshop.
15.08.22	Email	ABP issued invitations to Hazid Workshop III.
18.08.22	Email	ABP issued Draft HazLog for comment.
19.08.22	Email	APT requested confirmation of timescale for comments.
19.08.22	Email	ABP confirmed timescale.
22.08.22	Email	APT requested additional information in order to comment on Haz Log.
22.08.22	Email	ABP responded to additional information request.
23.08.22	Email	APT confirmed receipt of information.
24.08.22	Email	APT queried responses relating to construction - operation phase hazards and construction likelihood scores.
24.08.22 & 25.08.22	Email	ABP responded to queries and provided presentation of construction process.
26.08.22	Email	APT provide further clarification and updates on queries regarding Hazid Workshop.
26.08.22	Email	ABP responded to query regarding look up table.

26.08.22	Email	APT provided comments on the HAZID Workshop relating to NRA methodology, additional mitigation measures, supporting studies, concern for operations of finger pier.
30.08.22	Email	APT confirmed they would provide comments on workshop by 31.08.22.
31.08.22	Email	APT provided comments on Haz Log.
02.09.22	Email	ABP issued Final Haz Log for review.
09.09.22	Meeting	ABP and APT discussed outstanding concerns, consultation with HSE and relocation of finger pier.
16.09.22	Email	APT sent through comments on Hazard Logs relating to methodological concerns, application of risk controls, scoring and recent meeting on 09.09.22.
24.10.22	Email	ABP responded to APT letter of 26.08.22 regarding NRA approach and methodology, Mitigation, Duty holder and methodological shortfalls. ABP also advised of forthcoming additional statutory consultation.
24.10.22	Email	APT confirmed receipt of letter and noted the SSC.
27.10.22	Email	ABP issued notification of Supplementary Statutory Consultation.
27.10.22	Email	ABP issued notification of Supplementary Statutory Consultation.
31.10.22	Email	ABP providing further explanation on the purpose of the SSC and confirming that additional navigational simulations will take place in November/December.
08.11.22	Email	ABP followed up on whether APT have any comments on the draft protective provisions
10.11.22	Phone Call	ABP and APT discussed additional simulations that are to be run in November
14.11.22	Email	APT suggested additional simulations that should form part of the workshop.

16.11.22	Email	APT confirmed they would respond on Protective Provisions once legal team have considered them.
18.11.22	Email	APT requested clarification on arrangements for navigational simulations.
22.11.22	Email	ABP confirmed arrangements for simulations.
23.11.22	Phone Call	ABP and APT discussed final arrangements for simulations.
25.11.22	Email	APT provided Second Statutory Consultation response.
15.12.22	Email	ABP followed up on email sent on 29.06.22 regarding draft licence for relocated buoy.
16.12.22	Email	APT Legal advisor confirmed that they are instructed and requested a copy the current licence.
19.12.22	Email	ABP sent through licence and queried whether the new licence will be complete by 2nd January.
19.12.22	Email	APT Legal advisor confirmed the licence will be the 2 or 3rd week in January.
20.12.22	Email	ABP provided a response to APT comment regarding vehicle access to Robinson Road.
21.12.22	Email	ABP issued notification advising of the inclusion Compulsory Purchase Powers regarding mooring buoy.
22.12.22	Email	ABP outlined the current position relating to discussion on the relocation of buoy and explained the reason a letter was sent regarding CPO powers relating to mooring buoy.
22.12.22	Email	APT confirmed that discussions had not progressed that far and still waiting to hear back from ABP property contact.
22.12.22	Email	ABP replied and asked who should be contacted to progress legal matters.

22.12.22	Email	APT confirmed receipt of letter regarding CPO Powers.
29.12.22	Email	ABP issued Draft Protective Provisions.
30.12.22	Email	ABP confirmed additions to the new licence.
11.01.23	Email	ABP followed up on draft licence for relocated buoy.
11.01.23	Email	APT legal advisor to contact client to confirm instructions.
17.01.23	Email	APT response to draft protective provisions confirmed that they are not sufficient to address concerns raised in consultation responses or in recent correspondence.
07.02.23	Email	APT acknowledge that application has been withdrawn and request to have early sight of various DCO documents in order to progress discussions on the protective provisions.
13.02.23	Email	ABP responded to APT letter 07.02.23.
28.02.23	Email	ABP followed on from emails on 22.12.22 asking who should be contacted to progress the agreement.
06.03.23	Email	APT requested a legal undertaking related to the costs to review and negotiate PP.
09.03.23	Email	APT highlighted areas that had previously been agreed but still need to be dealt with in the draft agreements, including the implications of IGET.
09.03.23	Email	ABP issued to HOTT notice of acceptance of application.
21.03.23	Email	APT requested for Traffic Analysis as they don't seem available on PINS website.
19.04.23	Email	APT Submitted relevant representations.
24.03.23	Email	ABP sent through requested traffic information.

25.04.23	Email	ABP sent a letter confirming the provision of a costs undertaking in favour of HOTT to review and negotiate Protective provisions.
19.05.23	Email	APT requested additional shipping and navigation data in order to review the submitted information and to undertake a separate NRA.
26.06.23	Email	ABP stated why the additional shipping and navigation data requested by APT could not be provided.
28.09.23	Letter to Examining Authority	ABP and APT agreed a joint letter regarding impact protection measures which was submitted into the Examination.
16.10.23	Email	APT sent a letter regarding concerns on risk control measures.
20.10.23	Email	ABP sent a letter in relation to ExA Action Point 17 and proposed simulations
23.10.23	Email	APT sent a letter regarding initial concerns on the proposed simulations
23.10.23	Email	ABP sent a letter regarding APT concerns on proposed simulations
31.10.23	Email	APT sent a letter maintaining concerns with simulations
4.11.23	Email	ABP shared the pre-read for the call to discuss Humber control measures and potential IERRT control measures.[1]
7.11.23	Email	APT sent a letter as an interim response to ABP's proposed change request raising initial concerns
10.11.23	Email	APT requested additional information regarding the potential procedural controls offered. [1]
13.11.23	Email	APT sent a letter responding to the consultation on the proposed change request

[1] These communications were made without prejudice.However, the parties agreed to waive this privilege during Issue Specific Hearing 5.

14.11.23	Email	APT confirmed that there was not enough time to be able to attend the simulations on 15 and 17 November after receiving notification via voicemain on the afternoon of Friday 10 November. APT also sought information of what the "Impact protection" simulations were intended to cover.[1]
15.11.23	Email	ABP provided an update on the simulations, enhanced procedural controls and the design basis, including sharing the Design Basis Document.[1]
22.11.23	Email	APT clarified that various aspects of evidence are still required from ABP, including regarding the simulations, so that APT can take advice from its professional team.[1]
4.12.23	Letter	APT requested ABP provide an adequate response to various outstanding requests for information

3 Section 3 – Matters Agreed and Matters Not Agreed

3.1 Table 3.1 below contains a list of ‘matters agreed’ and a list of matters outstanding at the date of this version of the SoCG together with a concise commentary as to the items referenced.

Table 3.1: List of Matters Agreed and Outstanding

Matter	Document Reference	ABP's Position	IOT Operators' Position	Status
Relevant Policy		The National Policy Statement for Ports (NPSfP) (DfT, 2012) is the key relevant national policy statement in considering the IERRT Application. The role of the NPSfP in the IERRT application determination process is set out in section 104 of the Planning Act 2008. The UK Marine Policy Statement (MPS) (2011) and The East Marine Plans (2014) are appropriate marine policy documents to which regard must be had in the IERRT determination process. Key local policy of relevance to the IERRT project is provided within the North East Lincolnshire Local Plan 2013 to 2032 (April 2018).	Subsections 104(3) and 104(7) of the Planning Act 2008 provide: (3)The Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies. (7) This subsection applies if the Secretary of State is satisfied that the adverse impact of the proposed development would outweigh its benefits.	
The Government's policy for ports		The Government's policy for ports is set out within section		

		3.3 of the NPSfP, the fundamental policy element is provided in NPSfP paragraph 3.3.1.		
Navigational safety to and from the IOT	APT and HOTT Relevant Representation (RR-003) APT Principal Areas of Disagreement (PDA – 003) Navigation Risk Assessment (NRA) (APP-089) Navigation Simulation Study – Part 1 (APP-090) Navigation Simulation Study – Part 2 (APP-091) Navigational Simulations – Stakeholder demonstrations (APP-092)	ABP, as the Applicant and as SHA for the Port of Immingham is confident that the conclusions of the comprehensive Navigation Risk Assessment (NRA) (APP-089) undertaken to assist its consideration of the Proposed Development are both correct and appropriate. ABP is satisfied that, that in light of the comprehensive NRA exercise undertaken, supported by the navigational risk workshops and supplemented by the navigational simulations ,the navigational risks have been comprehensively and properly assessed.	The IOT Operators disagree with the conclusions of the IERRT NRA, and with the suggestion that those conclusions are supported by the workshops and simulations. The IOT Operators' position is that the navigational risks have not been properly assessed in the Applicant's IERRT NRA. The IOT Operators raised these concerns in their own sNRA in response to the Applicant's proposals [**REP2-064**]. In its letter of 27 September 2023 [**AS-020**] the Applicant inidicated it would make a change to its scheme to accommodate impact protection capable of mitigating (to an acceptable level) the risks	

			identified by the IOT Operators' sNRA [**REP2-064**]. The IOT Operators' response to the change notification [**REP6-046**] explains why the Applicant's intended changes will not adequately address navigational safety impacts.	
Inadequate NRA methodology	APT and HOTT Relevant Representation (RR-003) APT Principal Areas of Disagreement (PDA – 003)	Preparation of the NRA was undertaken in full compliance with the PMSC and the associated GtGP.	There are significant concerns with the adequacy of the IERRT NRA which are addressed in the IOT Operators' sNRA [**REP2-064**]. The IOT Operators' position is therefore that the IERRT NRA methodology was inadequate.	
Navigation Baseline and Future Baseline	APT and HOTT Relevant Representation (RR-003) APT Principal Areas of Disagreement (PDA – 003)	The NRA has taken into account the current navigation baseline and has then used DfT statistics to anticipate future potential changes.	The IOT Operators disagree that the IERRT NRA has taken into account the necessary information regarding the navigation baseline and future baseline.	

			These issues are highlighted in the IOT Operators' sNRA [**REP2-064**] and summarised at paragraph 34.	
NRA Tidal Modelling	APT Principal Areas of Disagreement (PDA – 003)	The simulations used a representative tidal model based on accurate, verified, and reliable AWAC buoy data, from the area immediately adjacent to the IERRT terminal to inform the simulations.	The IOT Operators' concerns regarding the accuracy of the NRA tidal modelling were raised in the IOT Operators' sNRA [**REP2-064**] from paragraph 98.	
Tolerability	APT and HOTT Relevant Representation (RR-003) APT Principal Areas of Disagreement (PDA – 003)	The tolerability levels have been reviewed and agreed entirely in line with correct practice and verified by the Duty Holder following the outcomes of the NRA and advice of specialists.	The tolerability issues are discussed in the IOT Operators' sNRA [**REP2-064**] from paragraph 50 which concludes that standards and limits of acceptability/ tolerability were not well defined and do not align with HSE/ COMAH standards. As such the IOT Operators' position is that the tolerability levels used in the IERRT NRA are not acceptable. The hazard workshops did not facilitate the input of all stakeholders and no	

			attempt was made to reach a consensus on tolerability.	
NRA baseline data	APT Principal Areas of Disagreement (PDA – 003)	Quality written assessment of vessel traffic by vessel category was undertaken through the assessment of AIS data collected as described in APP-089. The study area is described with sufficient detail for a reader to understand the context of shipping movements within the area.	Paragraph 34 of the IOT Operators' sNRA [**REP2-064**] summarises these issues with the IERRT NRA, concluding that there are inaccuracies, overlooked key information and insufficient analysis within the description of the navigation baseline information. The IOT Operators' position is therefore that the IERRT NRA baseline data is not sufficient or acceptable.	
HAZID to identify risk controls/ mitigation	APT and HOTT Relevant Representation (RR-003) ES - Volume 3 - Appendix 10.1 - Navigation Risk Assessment (APP-089) APT Principal Areas of Disagreement (PDA – 003)	HAZID workshops were held and are documented in APP-089. The IOT Operators attended the second and third iterations of these and their suggested mitigations (further applicable control suggestions) were recorded and fully taken into account.	The IOT Operators' suggested mitigaitons have not been taken into account.	

Relocation of the Finger Pier	APT and HOTT Relevant Representation (RR-003) ES - Volume 3 - Appendix 10.1 - Navigation Risk Assessment (APP-089) APT Principal Areas of Disagreement (PDA – 003)	The suggested control from the IOT Operators to move the Finger Pier was considered at the HAZID workshop and subsequently as part of the NRA exercise and has been concluded that, in light of the assessments undertaken, relocation of the finger pier is not required to satisfy the SHA. In their letter to the ExA dated 28 September 2023 [AS-020], the Parties agreed on a list of matters which would form the basis of further negotiations for the provision of enhanced impact protection measures. This agreement did not include the relocation of the IOT Finger Pier.	Section 11.2.1 of the IOT Operators' sNRA [**REP2-064**] identifies that relocation of the IOT Finger Pier is provided as a risk control measure. Section 12.4 provides a cost benefit analysis justifying the requirement for that risk control measure. The IOT Operators' have explored options which would avoid the need to relocate the IOT Finger Pier in the design workshops attended with ABP in early October 2023. Those options included an extension to the Finger Pier to allow the relocation of a coaster berth from the southern side of the IOT Finger Pier to its northern, as expressly identified in the letter of 28 September [**AS-020**]. The IOT Opeartors' captured the outputs of those design workshops in their letter of 16 October [**REP5-036**].	

			It is for the Applicant to advance adequate mitigaton for its proposals. To date it has failed to do so – relocating the IOT Finger Pier would remain a means of doing so. The inadequacy of the Applicant's mitigation proposals are captured in the IOT Operators' response ot the change notification [**REP6-046**].	
IOT impact protection (in submission but not confirmed)	APT and HOTT Relevant Representation (RR-003)	Whilst ABP, as per the NRA submitted with the Application, does not consider that such measures are required, IOT impact protection has been identified as a potential control and may form part of the operational 'adaptive procedures' (as it appears in the Hazard Logs) which will be determined by the Navigation Authority. The Applicant has, by letter dated 19 October 2023 [AS-026] and the accompanying Proposed Changes	In its letter of 27 September 2023 **[AS-020]** the Applicant indicated it would make a change to accommodate impact protection capable of mitigating (to an acceptable level) the risks identified by the IOT Operators' sNRA. It should be noted that vessl impact protection would be a physical barrier and would not be an "operational adaptive procedure", The IOT Operators' have explored options to deliver	

		Notification Report [AS_027], notified the ExA of its intention to submit a Request to Make Changes to the submitted DCO application. It is anticipated that this request will include Enhanced Operational Controls in terms of directions by HES and the potential Provision of Additional Impact Protection Measures. The Request to Make Changes, and any Additional Impact Protection Measures, will be without prejudice to ABP's position that impact protection measures are not required. As detailed in ABP's Proposed Changes Notification Report [AS_027], negotiations between the Parties in relation to additional impact protection measures have culminated in the emergence of specific requirements from the IOT Operators which ABP considers go beyond those which were the subject	the necessary impact protection in the design workshops attended with ABP in early October 2023. The IOT Opeartors' captured the outputs of those design workshops in their letter of 16 October [**REP5-036**]. Those requirements follow and are in accordance with the indicative design appended ot the Applicant's letter of 28 September [**AS-020**]. No new "specific requirements" were identified. The use of sacrificial impact proection proposed by ABP significantly extends the Finger Pier extension required. The IOT Operators explain why the reasons advanced by the Applicant for not providing the neceasry impact protection in their change notification consultation response are	

		of the agreed letter to the ExA dated 28 September 2023 [AS-020]. ABP and its experts do not consider the scheme now required by IOT Operators to be feasible due to navigational, engineering, environmental and scheme viability reasons.	insuffcient at [**REP6-046**], see para 1.8 in particular. The Applicant indicates viability is a reason for not delivering the necessary mitigation. If that case is being advanced, full details of the viability information relied on should be provided to the ExA. To date, the only cost benefit assessment before the ExA is that shown at 12.4 of the IOT Operators' sNRA [**REP2-064**]. That assessment clearly demonstrates the justification for providing the impact protection sought by the IOT Operators. The IOT Operators therefore disagree that the impact protection sought by the IOT Operators is new or unfeasible.	
Marine Liaison Plan	APT and HOTT Relevant	The SHA will review the need for any required	The IOT Operators had understood that the	

	Representation (RR-003)	addition to the Local Port Services and Vessel Traffic Services. The Construction Environmental Management Plan, at table 3.4, includesa Liaison Officer to act as co-ordinater between the port and contractors in order to ensure the safety of Port users, construction staff and the environment.	Applicant has agreed to the inclusion of this measure as draft protective provision 4 of its preferred protective provisions. The relevant provision is provided as part of [**REP1-039**] to which the Applicant's agreement appears in its letter of 28 September [**AS-020**]. The IOT Operators have made minor adjustments to this drafting in their [**REP6-046**]. However, the Applicant has since resiled from that agreement in its protetive provisions submitted following ISH6. It is noted that the ExA has requested the Applicant provide detailed reasons for doing so {**PD-019**]. In the absence fo the protective provision requiring a Marine and Liasion Plan [**PRE1-039**] there is not mechanism by	

			which the IOT Operators can ensure the priority berthing which has been committed to by the Applicant and Harbour Master Humber is provided.	
Protective provisions	APT and HOTT Relevant Representation (RR-003)	The proposed protective provisions are subject to ongoing negotiation between the Parties. Negotiations aim to ensure that ABP will only be able to exercise powers under the DCO subject to sufficient protection and safeguards for IOT Operators' assets and interests..	The Applicant has provided its preferred protective provisions on 29 November following ISH5. They remain in the form provided by the Applicant at D6 [REP6-003] and are therefore not acceptable to the IOT Operators. They are an order of magnitude away from the previous commitment of the Applicant [**AS-020**] to enter into protective provisions substantially in the form of **REP1-039.** The IOT Operators are disappointed that ABP has resiled from the position detailed in its letter of 28 September to the Examining Authority, without any notice to or	

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			prior engagement with the IOT Operators. It is noted that the ExA has requested the Applicant provide detailed reasons for doing so [**PD-019**].	
Agreed letter to the ExA dated 28 September 2023 [AS-020]		Following receipt (from IOT Operators and their consultants, Beckett Rankine) of a ***"high level design review for a potential impact protection system that could be installed at IOT"***, the Parties agreed to work together with a view to developing a scheme of marine infrastructure protection for the IOT based on the Beckett Rankine high level proposals and in accordance with a list of agreed principals set out in the 28 September letter. Without prejudice to its stated position on impact protection and subject to further refinement of the design, ABP (in the same letter) committed to submit a changes application	The IOT Operators' positon on the Applicant's commitments in its letter of 28 September [**AS-020**] are outlined in previous rows of this table. The Applicant appears to be resiling from all concessions made in that letter, some two months after it was sent and without a material change in circumstances or evidence base in the intervening period.	

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		amending the Application in order to deliver the revised measures.		

4 Section 4 – Signatories

This Statement of Common Ground is agreed:
On behalf of IOT Operators:
Name
Signature
Date:

On behalf of ABP:
Name:
Signature:
Date:

Glossary

Abbreviation/ Acronym	Definition
ABP	Associated British Ports
APT	Associated Petroleum Terminals (Immingham) Limited
CPO	Compulsory Purchase Order
DCLG	Department of Communities and Local Government (as it then was)
DCO	Development Consent Order
DfT	Department for Transport
EIA	Environmental Impact Assessment
ES	Environmental Statement
GI	Ground Investigations
Hazid Workshop	Hazard Identification Workshop
HazLog	Hazard Log
HES	Humber Estuary Services
HOTT	Humber Oil Terminals Trustees Limited
HSE	Health and Safety Executive
IERRT	Immingham Eastern Ro-Ro Terminal
IOT	Immingham Oil Terminal
IOT Operators	APT and HOTT
Nav Sims	Navigational Simulations
NRA	Navigational Risk Assessment
NSIP	Nationally Significant Infrastructure Project
PA 2008	Planning Act 2008
PINS	Planning Inspectorate
PMSC	Port Marine Safety Code
Ro-Ro	Roll-on/roll-off
SoCG	Statement of Common Ground
SoS	Secretary of State for Transport
UK	United Kingdom

Deadline 7 Appendix 3

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
IOT Operators / ABP – Without Prejudice email exchanges regarding control measures a. ABP to APT, RE: Without Prejudice – IERRT Control Measures – Pre-read, 4 November 2023 (Attachment: Humber Control Measures and Potential IERRT Control Measures – 26 October 2023) b. APT to ABP, RE: IERRT Control Measures, 10 November 2023 c. APT to ABP, RE This weeks simulation runs, 14 November 2023 d. ABP to APT, RE: Without Prejudice – ABP Reply to APT Emails (10-14 Nov), 15 November 2023 (Attachment: Memorandum IOT Vessel Impact Protection Structures – Design Basis – 14 November 2023 e. APT to ABP, RE: Without Prejudice – ABP Reply to APT Emails (10-14 Nov), 22 November 2023

From: [redacted]
Subject: Without Prejudice - IERRT Control Measures - Pre-Read
Date: 04 November 2023 18:53:54
Attachments: [redacted]

Caution: External Email

Without Prejudice

Good Afternoon,

Please find pre-read for our call on Thursday to discuss Humber control measures (in general) and potential IERRT control measures.

Have a good weekend.

Best regards,

Paul

Paul Bristowe | Head of Marine Humber | Associated British Ports
Mobile: [redacted]

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26 October 2023

Humber Control Measures and Potential IERRT Control Measures

Current Humber Control Measures:

- Table 1 lists the current control measures (identified through the risk assessment process) which are already applied to all Marine activities on the Humber.

Table 1: Current Humber Control Measures		
Prohibited anchorage areas	Hydrographic surveying program	Passage planning (VTS/LPS/PAVIS function)
Mooring studies & plans	Berths - allocation (depth, available, suitable)	Passage planning (Pilot/PEC)
Communications - dock/jetty and traffic	Emergency plans - port (local)	Ploughing or Dredging programme
Communications - other port users	Waste management plan - port	Communications equipment - operational
Communications - port and agents	Oil spill contingency plans	C.C.T.V. coverage
Bridge resource management training	Risk assessment - personal safety	Vessel information - access to Lloyds/Seaweb
Fatigue & Health monitoring	Safety procedures - vessel	AIS coverage
Pilot boarding point - designated	Bunkering areas restricted	Radar coverage & redundancy provision
VTS - traffic organisation service	Emergency plan exercises	Simulator based studies
Passage planning (VTS/LPS/PAVIS function)	Prohibited anchorage areas	Tidal information - accurate
Passage planning (Pilot/PEC)	Mooring studies & plans	Hydrographic information - latest available
Ploughing or Dredging programme	Communications - dock/jetty and traffic	PAVIS
Draught - accurate, declared and within max limits	Communications - other port users	Tugs - availability of appropriate
Arrival/departure - advance notice of	Communications - port and agents	Tugs - fire tug available
Hazardous cargoes - advance notice of	Bridge resource management training	Ship personnel - training
Traffic separation scheme	Fatigue & Health monitoring	Pilots - training and authorisation
VTS broadcast - traffic information	Pilot boarding point - designated	Port marine/operations personnel - training
VTS broadcast - navigation and safety information	VTS - traffic organisation service	VTS personnel - training and authorisation
Line/Boatmen - available and suitably qualified	Guard/patrol vessels	ABP Health & Safety policy
Pollution response equipment - available	ABP Security policy	PMSC compliance - marine policy
Pre-bunkering checklist	Ramps/hatches - closed when underway	General directions
Harbour/Dock Masters powers (inc. special directions)	ISPS compliance	Pilotage directions
Byelaws	Channel/fairway - Management of	Port state inspection - MCA
Notices to mariners	VTS - navigation information service	STCW
Towage guidelines	Safe systems of work	Hydrocarbon tankers certified gas free
Vessel defects - requirement for notification	Guidance for small craft	Pilot launch/other vessels - operational
SOPs - operational	ABP Environmental policy	Marine engineering support

A.C.O.P. Safety in docks	Aids to navigation - provision & maintenance of	Emergency power supply
Anchorage positions - designated	Loss of dock water containment plan	Guidance/Welcome Pack for visiting vessels
POB declared (Total number)	Flood contingency plan	Emergency Towage
International COLREGS 1972 (as amended)	Portable Pilot Units (PPU)	Harbour Authority mandated carriage of AIS for non SOLAS vessels
Emergency Services / Equipment - shoreside availability	Unusual vessels - specific risk assessments	Business Continuity Plan
PECs - training and authorisation	Ship personnel - training	Tugs - tug/workboat and crew certification checked
Shoreside facility maintenance programme	Tugs - non routine towage assessment	Emergency response centre (MRC)
Tugs - escort towage/accompanying	MA Notices	Harbour directions
Local port service (LPS)	Pilot/Master exchange - records of	Pre arrival information (Port to Ship)

IERRT Draft Initial Control Measures

Towage: Table 2 shows possible IERRT Towage requirements (based on experience of similar vessels and similar operations) which may be applied for IERRT depending on the circumstances with enhanced measures to address specific APT concerns in red.

Table 2: Potential IERRT Towage Requirements				
Berth	**Tide / Wind**	**Arrival**	**Departure**	**Notes**
Berth 1	Ebb < 2.5 kts	1 tug forward	-	See note 1 & 2
	Ebb > 2.5 kts	1 tug forward & 1 aft	1 tug forward	See note 1
	Flood < 2.5 kts	-	-	See note 3
	Flood > 2.5kts	1 tug forward & 1 aft	1 tug forward	See note 1
Berth 2 & 3	Ebb < 2.5 kts	-	-	See note 4
	Ebb > 2.5 kts	1 tug forward & 1 aft	1 tug forward	See note 6
	Flood < 2.5 kts	-	-	See note 5
	Flood > 2.5kts	1 tug forward & 1 aft	1 tug forward	See note 6
Berths 1 & 2 & 3	Mean 'Beam' Wind >20kts (170-280 / 340-100)	1 tug forward & 1 aft	1 tug forward	See note 6

Initial Towage Rationale:

While some requirements may be relaxed or increased following further assessment or change in vessel, the requirements highlighted in red will remain as they are IOT related mitigation measures. The Master, PEC or Pilot at their discretion may require additional tugs beyond the requirements set out above.

- Note 1 - For all ebb arrivals and flood arrivals in tidal current conditions greater than 2.5 kts, to Berth 1, one or more tugs, depending on circumstances, may be required. For example, should there be a breakdown of machinery, the tug(s) can hold the vessel in position allowing the remedial action to be undertaken in a controlled manner.

- Note 2 - For ebb departures from Berth 1 in tidal current conditions less than 2.5kts, tugs are not deemed necessary as the vessel is starting from a position of zero inertia and increasing distance and speed away from IERRT/IOT infrastructure. Should there be a breakdown of machinery, the forward momentum will provide sufficient time for the vessel to enact remedial action.

- Note 3 - For arrivals and departures from Berth 1 on a flood tide in current conditions less than 2.5 kts, a tug is not deemed necessary as, should there be a breakdown of machinery, the tide will push the vessel away from any infrastructure and the vessel can manoeuvre.

- Note 4 - For arrivals and departures from Berth 2 & 3 on an ebb tide in current conditions less than 2.5 kts, a tug is not deemed necessary as, should there be a breakdown of machinery during manoeuvring, the vessel would contact the IERRT berth infrastructure.

- Note 5 - For arrivals and departures from Berth 2 & 3 on a flood tide in current conditions less than 2.5 kts, a tug is not deemed necessary as, should there be a breakdown of machinery, the tide will push the vessel away from any infrastructure and the vessel can safely manoeuvre.

- Note 6 - Where tugs are required for any state of tide or wind conditions, these requirements are in line with the most stringent requirements in place at other RoRo berths on the river and may be reduced where not directly related to risk mitigation for IOT.

Standard Operating Procedures (SOPs) including Berth Limits:

- During the construction phase of the terminal, comprehensive simulations will be undertaken, as is normal practice with any new marine infrastructure within the Humber ports, to establish the operating procedures of each berth under varying environmental conditions. Initially, procedures and limits will be over-cautious until experience in the intricacies of manoeuvring at the terminal is developed. This is common industry practice when operating at a new terminal and, as an example, HES/ABP has employed this practice when Hull Alex Green Port, Humber Sea Terminal and the Immingham Outer Harbour were constructed.

- These procedures will be enacted through a soft start approach when the berths first become operable. Over time, with increasing experience the operational procedures will be amended where necessary to ensure the safe operation of the terminal continues.

- All procedures will be in line with industry standard procedures similar to other Ro-Ro terminals operating on the Humber.

Vessel Traffic Management:

- VTS Humber and to the Immingham Dock Master will update their SOPs if required.

- When operations commence at IERRT a soft start approach will be employed where arrivals and departures at IERRT will be managed around normal river traffic ensuring that IERRT traffic does not interact with other traffic for the preliminary operating period.

Pilotage and PEC requirements:

- Prior to commencement of operations at the terminal, Pilots & PECs will receive bespoke simulator training. Initially, a select group of pilots will undergo this training alongside vessel masters who intend to obtain a PEC for the berths where, as operations at the berth progress, over-time this group will train other Pilots and PECs to undertake these manoeuvres as is common practice.

- As operations develop, all Pilots who are of the appropriate authorisation (Class 1 and VLS) will undertake the bespoke simulator training to ensure the number of Pilots authorised for the terminal is beyond what is deemed as required of normal operation.

- PEC holders and Pilots will be required to demonstrate a thorough understanding of the operating procedures and manoeuvring practices through the examination and authorisation process. This examination and authorisation process will initially be above the requirements set out in the Pilotage Directions.

From: [redacted]
Subject: IERRT Control Measures
Date: 10 November 2023 13:33:30
Attachments: [redacted]

Caution: External Email

Dear Paul,

We have been reflecting on the conversation we had yesterday. We are prepared to continue to talk to you about potential procedural controls, but need a lot more information before we can reach any sort of conclusion on those being offered. I've set out the immediate queries we would like you to address (in writing) below. Once we have your response, we can let you know whether in principle a procedural control is going to be acceptable instead of (or in addition to) impact protection.

In the meantime, you will appreciate I am instructing our team to advance our case on your existing application at the hearings from 21 November. There is very limited time in which any agreement could be reached between us.

We have the follow up meeting in the diary for next Wednesday, but unless you can provide some or all of the information below in good time ahead of that meeting to allow review, and with Deadline 6 on Monday, I can't see there will much to discuss. We should look to rearrange for a time when this information will be available.

Kind regards

Matt

IOT queries with "potential IERRT control measures – without prejudice 4.11.23"

There appear to be certain assumptions relied on by ABP in its proposed control measures, which IOT would like to see evidence for:

1. Can the IERRT infrastructure withstand impact by an IERRT vessel (either Stena T Class 21,451t displacement or IERRT Design Vessels 48,431t displacement) at 2.5 knots? Please provide evidence of calculations used to demonstrate this.
2. Can a Humber tug arrest an IERRT design vessel at speeds between 2.5 - 4.5 knots during peak and average ebb tides prior to impact with IERRT or the IOT Finger Pier? Please provide evidence of calculations used to demonstrate this.
3. Is there sufficient space for tugs to operate (fore and aft) as proposed for IERRT Design Vessels berthing on each of IERRT berths 1, 2 and 3? For berth 1, is that the case if there is a coaster on IOT finger pier berth 8?
4. When and how should tugs make fast:
    a. Concern around making fast prior to the swing due to vulnerability of forward tug and IERRT master preference to use ships manoeuvring aids (it is preferable to

secure prior to A1 dolphin so that tug is secured at all times when vessel is inside the line of IERRT outer berths) – because if not attached during the swing, then the tugs won't be able to arrest the vessel at this point of the manoeuvre and therefore would only be of benefit after the swing and once secured.

b. If "arrest tugs" are secured via the centre lead forward, then in any off-berth beam wind this means the tug is unlikely (with the line fast) to be able to position sufficiently far aft to push up on the flat side – so it maybe that an additional tug to that proposed is needed in some weather conditions.

Whilst it is for ABP to go about evidencing those assumptions, the advice APT has received from its consultants is that the following would be required:

5. Bridge Simulation

    a. Minimum 3 days to test various towage configurations including:

        i. Size / type of tug (should include senior towage company representative – e.g. superintendent / management - and not rely on the judgement of a single tug skipper).
        ii. IERRT Design Vessel (or closest vessel possible – note HR Wallingford confirmed they have, internally, done this with a vessel of similar size to the IERRT Design Vessel size) – include both seasoned Stena Masters and ABP pilots who would bring these vessels in and out.
        iii. Various tug "hook up" locations (before / after swing)
        iv. All IERRT berths
        v. Various emergency situations (partial / full black out, bridge team errors, bow thrust failure etc.)
        vi. Various wind / tidal conditions
        vii. Various visibility / night conditions
        viii. Investigate additional measures such as deployment of anchors

    b. This should help define the detailed parameters and agreed procedures of the control measure, and would be required to give comfort to APT that the control is effective.
    c. Option to include 1-2 days extra simulation for tankers / coasters visiting the finger pier (noting that we don't believe that simulations to date have taken into account the blocking and diverting effect of IERRT pontoons on flood tidal flows in vicinity of the Finger Pier – in fact HRW are still using a pre-DCO plan of the pontoons in which they were smaller).

IOT would then need to update its sNRA to check it agrees that such measures reduce the relevant risks to ALARP, and that towage is an effective control measure compared to impact protection.

To reiterate the question raised in the meeting, we would also ask that you please provide:

6. A proposal for how the procedural controls ABP would rely on would be secured and enforceable by APT. You indicated this would be through a side agreement – what would the terms of that side agreement be?

Matt Dearnley
Terminal Manager
APT (Immingham) Ltd
Queens Road | Immingham | N E Lincolnshire | DN40 2PN
Tel: [redacted]

Tom Gray

From: Olly Smith [redacted]
Sent: 14 November 2023 09:41
To: Paul Bristowe
Cc: Matt Dearnley; Edward Rogers; Nigel Bassett; Mike Parr; Sophie Young; Andrew Firman; Joe Smith; Ben Hodgkin; Sophie Young; Joshua Bush
Subject: RE: This weeks simulation runs

Good Morning Paul
Thank you for the information regarding the proposed Simulator runs at HR Wallingford on Wednesday 15th and Friday 17th November.

Unfortunately, given that this information was only briefly communicated within a voicemail on Friday afternoon and was only confirmed on Monday afternoon, APT does not have the available SME personnel to commit to another two simulator days at such very short notice. As you are aware, the APT team is incredibly busy preparing for the DCO hearings next week, as well as having to complete day-to-day business matters to enable them to attend those hearings.

Please note that APT has not received detailed written information of what these "Impact protection" simulations are intended to cover.
For the previous simulations attended at HR Wallingford last week, (7/8th November) there was a letter / email sent on 20th October setting out the intended scope of the simulations, followed by a briefing call and presentation on 31 October to discuss this information. As discussed at yesterday's meeting, these forthcoming scenarios are still "under development".

Before agreeing to attend any further simulations, APT would expect the detailed scope of those simulations to be communicated, so that APT can fully understand each run's purpose and give feedback on the proposed modelling. Given the considerable time constraints ahead of the DCO hearings next week, APT does not think there is sufficient time for those steps to be completed to enable meaningful attendance at HR Wallingford or via TEAMS this week.

Therefore, whilst APT are encouraged by the simulator scenarios that you are currently developing with HR Wallingford regarding Impact protection and welcome the opportunity to study the written proposals for these scenarios, could we suggest that these simulations are rescheduled to the next available simulator slot (*understand this is currently mid-December*) when both APT and our marine consultants (NASH) together with other stakeholders of the IOT Finger pier (such as coastal tanker and barge operators), will be able to participate and give meaningful feedback at these exercises.

Kind regards
Olly Smith

Marine Superintendent
APT (Immingham) Ltd
Queens Road | Immingham | N E Lincolnshire | DN40 2PN
Tel: [redacted]

From: Paul Bristowe [redacted]
Sent: Monday, November 13, 2023 12:49 PM
To: Olly Smith [redacted]
Cc: Matt Dearnley [redacted]

[redacted]

Subject: RE: This weeks simulation runs

Afternoon Olly,

HRW and ABP team are working as we speak to come up with a set of principles for the next round of sims at Wallingford, which will be developed into detailed run plans.

I can confirm the sim is available this week on Wed (15 Nov) and Fri (17 Nov) and hope that some/all of your team will be available to join.

Joe Smith is leading for ABP, but we are hoping to work collaboratively with APT and Nash Maritime – are you comfortable for us to approach Ed/Nigel direct? If so, Joe will set up a call later today to start that process.

I am in a meeting from 1400-1600, but available on my mobile outside of those times if you need to discuss further.

Best regards,

Paul

Paul Bristowe | Head of Marine Humber | Associated British Ports
Mobile: [redacted]

KEEPING BRITAIN TRADING

Tom Gray

From: Paul Bristowe [redacted]
Sent: 15 November 2023 18:19
To: Matt Dearnley; Olly Smith
Cc: Ben Hodgkin; Sophie Young; Greenwood, Brian; Alex Minhinick; Paul Bristowe
Subject: Without Prejudice - ABP Reply to APT Emails (10-14 Nov)
Attachments: 4021009-JAC-ZZ-01-TN-C-00001 - VIPS Design Basis P01.pdf

---

Dear Matt and Olly,

Further to our recent discussions around the enhanced operational controls relating to the operations of IERRT (and the summary of these controls shared on 04 November ahead of our meeting on 09 November) I wanted to drop you a quick note to follow up on our recent email exchanges.

References:

- Matt's email of Friday (10 November at 1333)
- Olly's emails Monday (13 November at 1000) and Tuesday (14 November at 0941)
- Teams meeting that Olly attended with ABP, Nash, and HR Wallingford on Monday 13th November at 1700 as referenced in Olly's email sent on Monday.

It was disappointing to hear, both on the call on Monday where we ran through the simulation proposals and subsequently confirmed by Olly in his email on Tuesday, that APT are unable to attend to simulations taking place at HR Wallingford this week.

It would appear that we misunderstood your message, in that we had inferred there to be a commitment from APT to attend further simulations prior to the next set of hearings. We arranged the simulations with a view to progressing our without prejudice discussions. I do appreciate that APT, like ABP, operate with a lean team and at times it can be challenging to prioritise resources.

Whilst it is disappointing APT were not able to attend, we decided to continue with the simulations, which are now underway. The plan is based on the principles discussed with Olly and Nash Maritime on Monday and the results will be shared with you for your information once completed.

I also wanted to provide an update to the six points included in Matt's email from Friday 10 November:

1. IERRT infrastructure design – I can confirm that the design of the IERRT infrastructure includes a vessel impact design scenario. A conservative design has been assumed, based on the Stena T Class vessel, with an impact speed of 2.5 Knots. This is set out in the attached Design Basis Document.

2. Following engagement with Humber marine pilots and HES, a 50T tug will arrest the Stena T class vessel prior to impact with IERRT or the IOT Finger Pier and the simulations carried out so far this week have demonstrated this.

3. Extensive previous simulations have been completed and submitted to the Examination using the Jinling class of vessel. As has been explained during the examination, the Jinling has been used as a proxy for a future design vessel to demonstrate that larger vessels can operate within the spatial constraints of the IERRT infrastructure (including the use of tugs).

4. The additional simulations which APT attended last week (7th and 8th November), demonstrated that the most appropriate point for tugs to make fast is just to the north west of the IERRT dredged box (where the vessel swings or slows down during its approach). This manoeuvre is similar to comparable RoRo vessels requiring tugs for entering Immingham Dock bell mouth. As is appropriate, the exact point should be determined by the Pilot or PEC who is responsible for assessing the conditions and planning the manoeuvre, this of course will be supported by training and general pilotage guidance.

   Regarding the potential requirement for an additional tug in certain weather conditions, we note that the proposed enhanced operational control measures are minimum requirements to be met and the Harbour Master will apply further additional tugs if the weather conditions dictate. The simulations carried out so far this week have demonstrated that a single tug is capable of avoiding a risk to the IOT infrastructure in relevant conditions.

5. As above, this week's simulations have taken into account HRW's expert advice. We will share the outcomes of this with you and we hope this provides the necessary comfort that the controls proposed are effective to manage the risks associated with the IOT infrastructure.

6. We understand your position on securing the proposed enhanced operational controls and we acknowledge that this will be in a form of legally binding agreement between the two parties. We suggest that once the enhanced operational controls have been agreed, the precise format of an agreement is developed with input from our respective legal teams.

I hope the above provides a helpful update on the status of our various discussions. Separately the project team have received two letters from yourselves in the last week which they will be responding to in due course.

Best regards,

Paul

Paul Bristowe | Head of Marine Humber | Associated British Ports
Mobile: [redacted]

KEEPING BRITAIN TRADING

IOT Vessel Impact Protection Structures - Design Basis

Date: 14 November 2023
Project name: Project Sugar
Project no: B2460000
Attention: Daniel Landi
Company: Associated British Ports Ltd
Prepared by: Duncan Riches
Document no: 4021009-JAC-ZZ-01-TN-C-00001

Aperture @ Pynes Hill, Rydon Lane
Exeter, EX2 5AZ
United Kingdom
T +44 (0)139 226 9800
[redacted]

1. Introduction

1.1 Background

Associated British Ports (ABP), the owner and operator of the Port of Immingham, is proposing to construct a new roll-on/roll-off (Ro-Ro) facility within the Port to be known as the Immingham Eastern Ro-Ro terminal (IERRT). This facility is designed to service the embarkation and disembarkation of commercial wheeled cargo (i.e., Ro-Ro freight) carried either by accompanied trailer (where the Heavy Goods Vehicle (HGV) tractor unit and driver travel on the vessel with the trailer) or on unaccompanied trailers which are delivered to the embarkation port and then collected at the port of disembarkation by different HGV tractor units and drivers.

The project is needed to provide additional appropriate Ro-Ro freight capacity within the Humber Estuary in order to meet the growing and changing nature of demand, and thereby strengthen the estuary's contribution to an effective, efficient, competitive and resilient UK Ro-Ro freight sector.

1.2 Purpose of this Document

This design basis document sets out the functional, quality and performance requirements for construction of the Immingham Eastern Ro-Ro Terminal (IERRT) Vessel Impact Protection Structures (VIPS) arrangements.

The design of the VIPS shall be coordinated and align with the marine works requirements.

This document has been produced for the purpose of consultation with stakeholders.

2. VIPS Scope

The Vessel Impact Protection Structure works will include, but not be limited to, the design, construction, installation, testing, commissioning and remedying of defects of the following items:

- IOT Finger Pier VIPS dolphin
    - Positioned at the western end of the existing IOT finger pier and including for the removal of the 2no existing roller fender piles.
- IOT Trunkway Barrier
    - Positioned adjacent to the IOT trunk way.
- IERRT pontoons and associated restraint dolphins
    - For each pontoon, 1no Type 1 Dolphin and 3no Type 2 Dolphins.

The structures are identified in Figure 1

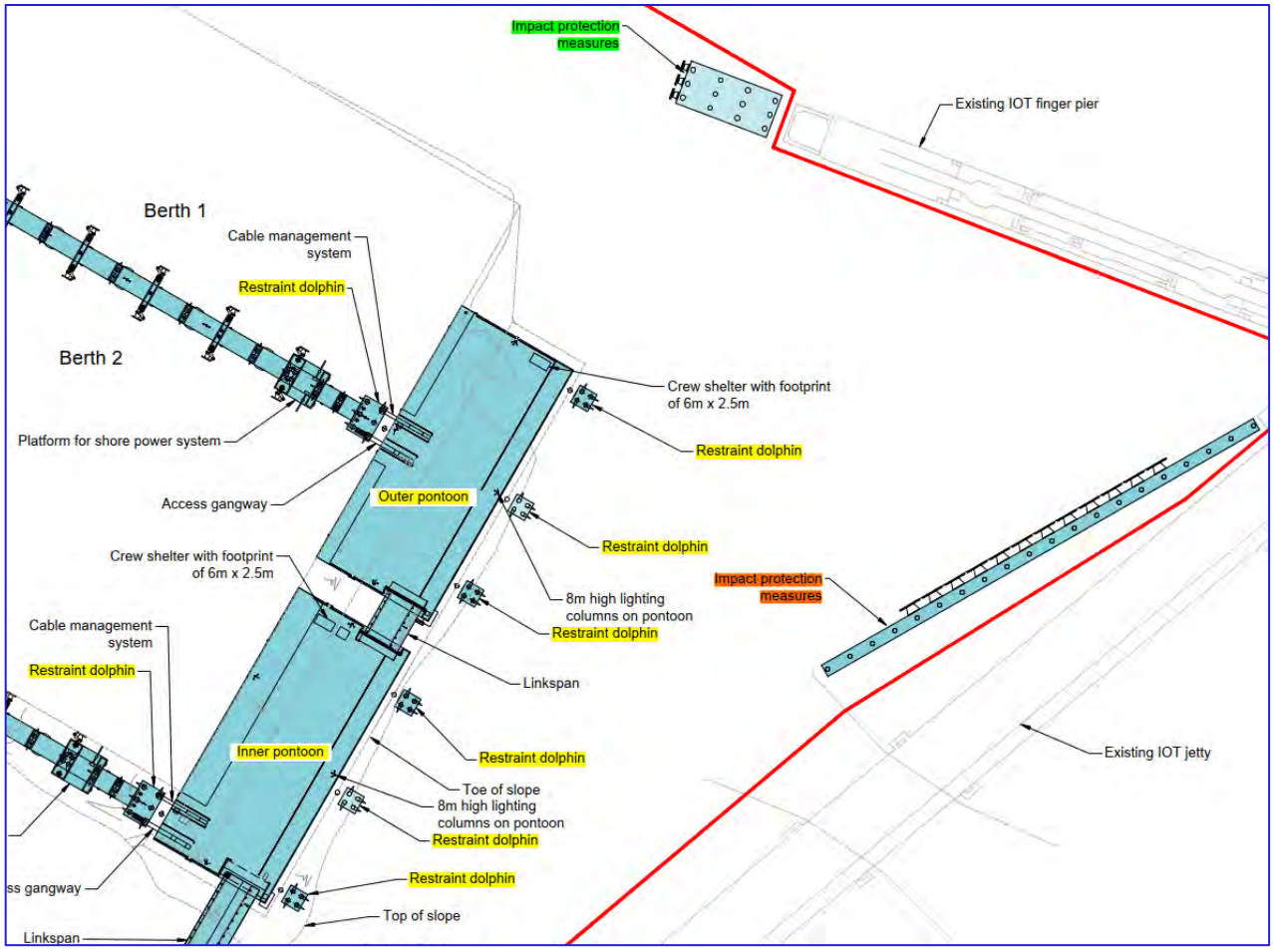

Figure 1 - Vessel Impact Protection Structures

3. Proposed Design Basis

3.1 Alignment of the VIPS with Marine Works

Except where specifically identified by this design basis, the Vessel Impact Protection Structures (VIPS) works are to be designed, constructed, installed, tested, commissioned and defects remedied in accordance with the Project Requirements.

3.1.1 Contractor's Design – General Requirements

No change to existing project requirements except when in conflict with the requirements set out in Section 4, in which case the requirements set out in this document will prevail.

3.1.2 Site Specific Information

No change to existing project requirements except:

- when in conflict with the requirements set out in Section 4, in which case the requirements set out in this document will prevail.
- Provision of IOT Finger Pier Information identified below.

Folder	Files	Folder	Files
2008 Halcrow Report		Arup Condition report 2013	
			Condition Assessment Report Final 2 (1) (1).pdf
	DI-IOTS-001.pdf		
	DI-IOTS-100.pdf		
	DI-IOTS-101.pdf	Concrete inspection 2013	
			2013.07.11 PJRFSL04014 Inspection Concrete Defects (1).pdf
	DI-IOTS-102.pdf		
	DI-IOTS-103.pdf		
	DI-IOTS-104.pdf	As-built drawing	
	DI-IOTS-105.pdf		80439.2.pdf
	DI-IOTS-200.pdf		80439.522.pdf
	DI-IOTS-201.pdf		80439.523.pdf
	DI-IOTS-202.pdf		80439.525.pdf
	DI-IOTS-203.pdf		80439.531.pdf
	DI-IOTS-300.pdf		80439.532.pdf
	DI-IOTS-301.pdf		80439.533.pdf
	DI-IOTS-302.pdf		80439.535.pdf
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3.1.3 Scheme Design Requirements

No change to existing project requirements except when in conflict with the requirements set out in Section 4, in which case the requirements set out in this document will prevail.

4. The VIPS Works

4.1 Function – General

a) Provide impact protection from the IERRT design vessels that have lost steerage / power on an ebb tide.

b) Provide impact protection from the IERRT design vessels at the defined impact speeds (refer to Table 4-2).

c) The VIPS will not have a berthing or mooring function.

4.2 Function – Structure Specific Detail

4.2.1 IOT Finger Pier VIPS dolphin

a) Protect the western end of the IOT Finger Pier from impact from an errant IERRT design vessel.

b) Provide roller fenders and panels to protect the IOT Design Vessels approaching the IOT Finger Pier Berths.

4.2.2 IOT Trunkway Barrier

a) Protect the western face of the IOT Trunk from an errant IERRT design vessel, landward of the Finger Pier, up to the existing navigation beneath the IOT Trunkway.

4.2.3 IERRT pontoons and associated restraint dolphins

a) Protect the western face of the IOT Trunk from an errant IERRT design vessel, landward of the termination of the Trunkway Barrier.

4.3 Materials and Structural Form

4.3.1 IOT Finger Pier VIPS dolphin

a) Tubular steel piles supporting a reinforced concrete pile cap.

4.3.2 IOT Trunkway Barrier

a) Tubular steel piles connected by a reinforced concrete beam.

4.3.3 IERRT pontoons and associated restraint dolphins

a) Pontoons positioned and restrained on guide piles.

b) Restraint dolphins are tubular steel piles connected by a reinforced concrete pile cap.

N.B. The pontoons and restraint dolphins are defined by the Performance Specification for Pontoons and Restrain Dolphins (4021009-JAC-ZZ-01-SP-C-00107).

4.4 Dimensions and Layout

The DCO General Arrangement, has been evaluated in the Environmental Statement in respect to habitat loss, limits of deviation, and maximum pile diameter for vibration and noise assessments. The contractor's design will have to be shown to meet the DCO conditions in Stage 1 of the contract.

The Environmental Statement in the draft Development Consent Order identifies limitations and restrictions related to piles and piling including but not limited to; habitat loss, noise, vibration, maximum diameter, etc. the Contractor will take into consideration in the preparation of their design and the implementation of the works these limitations and restrictions.

4.4.1 IOT Finger Pier VIPS dolphin

a) The Finger Pier VIPS Dolphin is to extend no further than 35m from the end of the existing IOT Finger Pier.

b) The Finger Pier VIPS Dolphin is to be no wider than 14m.

c) The dolphin is to be positioned within a parallel extension of the IOT Finger Pier berthing lines.

d) There is to be an isolation gap of 5m between the existing IOT Finger Pier and the VIPS Dolphin, to allow for deformation of the VIPS.

e) Provide an approach channel of not less the 86m between the IERRT structures and the IOT Finger Pier VIPS dolphin.

f) Not limit or intrude upon the IOT Design Vessel berthing and mooring arrangements of the existing IOT Finger Pier.

g) Have a finished deck level elevation not higher than +5.25mOD.

4.4.2 IOT Trunkway Barrier

a) The Barrier is to be structurally isolated from the IOT structures.

b) The Barrier is to align with, but not connect to the existing IOT impact barrier at the root of the Finger Pier. The distance off the IOT Trunkway will not be less than 5m.

c) The Barrier will be up to 155m long and have a finished level 5.25mOD.

d) The Barrier may extend up to, but not beyond the channel markers for the navigational arch, under the trunkway.

e) Have a finished deck level elevation not higher than +5.25mOD.

4.4.3 IERRT pontoons and associated restraint dolphins

a) The pontoons and restraint dolphins are defined by the Performance Specification for Pontoons and Restrain Dolphins (4021009-JAC-ZZ-01-SP-C-00107).

4.5 Design Criteria

a) The working Design Life of the civil and structural elements is 50 years.

b) Fenders are an acceptable component of the VIPS systems to absorb impact energy on the Barrier.

c) Impact loads to be calculated using:[1]

- prEN 1991-1-7. Eurocode 1: Actions on structures - Part 1-7: General actions - Accidental actions (draft dated 07 September 2023). The Contractor may assume that the design vessels are 'non-ice-classed vessels'.

d) The impact scenarios of the design vessels sailing at the speeds specified in this document are considered accidental design situations. It is accepted that the VIPS may no longer be serviceable if these accidental design situations, or more onerous ones, were to take place.

e) The IOT Design Vessels are presented in Table 4-1:

Table 4-1 IOT Design Vessels

Vessel	LOA (m)	Beam (m)	Draft (m)	Displacement (t)
Thames Fisher	91.5	15.5	6	6000
Thun Grace	103.46	15	4.9	5000
Barge	60.8	7.6		
Tugs 25t (bollard pull)	30			

f) Design to assume stern vessel impact.

g) The Contractor may make use of numerical models to support their understanding of the energy dissipation mechanisms that take place during an impact scenario.

The IERRT Design Vessel particulars are presented in Table 4-2:

[1] The force derived from the methodology set out in prEN 1991-1-7 (80.33 MN) has been deemed the most appropriate due to the following reasons:

- The equation provided in the AASHTO guidance to calculate the impact force was derived from testing with minimum impact speeds of 8 knots. The guidance warns that the use of the equation "*for very low speed levels may underestimate the actual force levels*". Therefore, the difference in speeds (circa 2.5 knots vs. 8 knots) is used as a justification to discard the impact force calculated as per the AASHTO guidance.
- The procedure set out in prEN 1991-1-7 is an evolution of the calculation model contained in the current version of the standard, where a distinction between "ice classed vessels" and "non-ice classed vessels" is introduced. Assuming that the vessels operating at IERRT are "non-ice classed vessels", the magnitude of the impact force obtained following the methodology set out in the current version of the standard may be deemed as an overestimation.

Table 4-2 IERRT Design Vessel Particulars

Vessel Particulars		2000-A	3000-A	1500-A	Future vessel
Deadweight (DWT)	(t)	12,300	8,423	8,600	-
Displacement	(t)	23,372	21,451	27,900	48,431
Length overall (LOA)	(m)	195.16	212.0	239.7	240.0
Length between perpendiculars (LBP)	(m)	-	194.8	227.7	225
Beam (B)	(m)	25.6	26.7	27.8	35.0
Draft, laden	(m)	7.5	6.3	6.4	8.0
Draft, light/ballast	(m)	6.6	4.7	5.1	-
Impact speed of Vessel	(knots)	2.5	2.5	2.5	1.8
Impact speed of Vessel	(m/s)	1.29	1.29	1.29	0.93

4.6 Workmanship and Maintenance

4.6.1 Concrete Construction

Refer to the Specification for Concrete (4021009-JAC-ZZ-01-SP-C-00102).

4.6.2 Piling

Refer to the following:

- Specification for Steel for Piles (4021009-JAC-ZZ-01-SP-C-00116)
- Specification for Pile Installation (4021009-JAC-ZZ-01-SP-C-00104)
- Specification for Steelwork Coatings (4021009-JAC-ZZ-01-SP-C-00105)
- Specification for Cathodic Protection (4021009-JAC-ZZ-01-SP-C-00106).

4.6.3 Structural Steel

Refer to the following:

- Specification for Structural steel (4021009-JAC-ZZ-01-SP-C-00103)
- Specification for Steelwork Coatings (4021009-JAC-ZZ-01-SP-C-00105)
- Specification for Cathodic Protection (4021009-JAC-ZZ-01-SP-C-00106).

4.7 Access for topside inspection and maintenance

Topside access by ladder from works boats is to be provided for the IOT Finger Pier Dolphin and IOT Linear Barrier.

No access is to be provided to or from the IOT structures.

Access arrangements for the Pontoons and associated restraint dolphins is to remain consistent with those defined by the Performance Specification for Pontoons and Restrain Dolphins (4021009-JAC-ZZ-01-SP-C-00107).

4.8 Lighting

No lighting to be provided to the IOT Finger Pier Dolphin.

No lighting to be provided to the IOT Linear Barrier

From: [redacted]
Subject: FW: Without Prejudice - ABP Reply to APT Emails (10-14 Nov) [Burges-WORK.FID10356350]
Date: 22 November 2023 09:47:30
Attachments: [redacted]

Caution: External Email

Dear Paul,

You do appear to have misunderstood. I explained in my email (10.11.23) that there were various things that APT needed to see evidence of. One aspect of that evidence involved simulations, and if those are to be carried out with APT involvement we would want (as Olly explained) to have the basis on which they are carried out explained (in writing) before hand so that APT can take advice from its professional team. As far as I am aware you haven't shared any written details of the simulations you were proposing last week. As well as an absence of detail on what the simulations were addressing, you also gave us far too little notice. As Olly explained, we have resource constraints, and other priorities. That includes preparing for the hearings which are taking place this week.

We did not offer any commitment to attend further simulations before the hearings.

On the remainder of your email, I have added some queries in red below.

I expect you have seen our response to your change request by now. You will have known your change request didn't meet the requirements we explained during the design meetings, so I doubt our response is a surprise.

If you would like to find a time to discuss around the edges of the hearings this week, we remain open to having that conversation.

Matt

Matt Dearnley
Terminal Manager
APT (Immingham) Ltd
Queens Road | Immingham | N E Lincolnshire | DN40 2PN
Tel: [redacted]

From: Paul Bristowe [redacted]
Sent: Wednesday, November 15, 2023 6:19 PM
To: Matt Dearnley [redacted]
Subject: Without Prejudice - ABP Reply to APT Emails (10-14 Nov)

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Whilst it is disappointing APT were not able to attend, we decided to continue with the simulations, which are now underway. The plan is based on the principles discussed with Olly and Nash Maritime on Monday and the results will be shared with you for your information once completed.

I also wanted to provide an update to the six points included in Matt's email from Friday 10 November:

1. IERRT infrastructure design – I can confirm that the design of the IERRT infrastructure includes a vessel impact design scenario. A conservative design has been assumed, based on the Stena T Class vessel, with an impact speed of 2.5 Knots. This is set out in the attached Design Basis Document. I asked for evidence of calculations used to demonstrate this position. I can't see they are included in your attachment – please provide them.

2. Following engagement with Humber marine pilots and HES, a 50T tug will arrest the Stena T class vessel prior to impact with IERRT or the IOT Finger Pier and the simulations carried out so far this week have demonstrated this. Please provide evidence to support this. The question also referred to the IERRT design vessel which is significantly larger than a Stena T class.

3. Extensive previous simulations have been completed and submitted to the Examination using the Jinling class of vessel. As has been explained during the examination, the Jinling has been used as a proxy for a future design vessel to demonstrate that larger vessels can operate within the spatial constraints of the IERRT infrastructure (including the use of tugs). The question concerned the operation of tugs on each of IERRT berths 1, 2 and 3, including with a coaster on IOT Finger Pier 8.

4. The additional simulations which APT attended last week (7th and 8th November), demonstrated that the most appropriate point for tugs to make fast is just to the north west of the IERRT dredged box (where the vessel swings or slows down during its approach). This manoeuvre is similar to comparable RoRo vessels requiring tugs for entering Immingham Dock bell mouth. As is appropriate, the exact point should be determined by the Pilot or PEC who is responsible for assessing the conditions and planning the manoeuvre, this of course will be supported by training and general pilotage guidance.

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5. As above, this week's simulations have taken into account HRW's expert advice. We will share the outcomes of this with you and we hope this provides the necessary comfort that the controls proposed are effective to manage the risks associated with the IOT infrastructure. Please confirm when you are intending to provide the results?

6. We understand your position on securing the proposed enhanced operational controls and we acknowledge that this will be in a form of legally binding agreement between the two parties. We suggest that once the enhanced operational controls have been agreed, the precise format of an agreement is developed with input from our respective legal teams.

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Best regards,

Paul

Paul Bristowe | Head of Marine Humber | Associated British Ports
Mobile: [redacted]

Image removed by sender.

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Immingham Eastern Ro-Ro Terminal

Deadline 7 Appendix 4

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
IOT Operators, IOT COMAH Report (2019) (excerpts)

ASSOCIATED PETROLEUM TERMINALS LIMITED

COMAH SAFETY REPORT

Issue 5
June 2019

Volume 1 – Main Text and Annexes

2 INTRODUCTION

2.1 PURPOSE OF THIS SECTION

The purpose of this section is to give general descriptive information about the establishment including details for setting up good communication channels with the competent authorities.

This section includes an overview of the establishment and gives brief details of the environment surrounding it.

2.2 INTRODUCTION

Associated Petroleum Terminals (Immingham) Limited (APT) operates the marine terminal facility of Immingham Oil Terminal (IOT). IOT is designated as an upper tier COMAH site.

The main activity is the loading and discharge of hydrocarbon products carried by vessels, the discharge of crude oil from vessels to refinery storage and the storage of hydrocarbon products in atmospheric storage tanks. This includes associated pipeline operation and management.

Immingham Oil Terminal (IOT) is situated on the south bank of the River Humber;

Latitude	**53° 37.8' North,**
Longitude	**000° 10.0' West,**
OS map reference	**TA 2082 1550**

The terminal is 1.2 kilometres SE of Immingham Dock entrance and 2.55km from the nearest town of Immingham, Ordinance Map reference: TA 1838 1470.

The Immingham Oil Terminal is connected by a pipeline system via the Common Pumping Station (CPS) to:

- TOTAL Lindsey Oil Refinery (TLOR)
- Phillips 66, Humber Refinery (HR)

CPS is situated 5.5 kilometres NW from the terminal - Ordinance Survey map reference TA 1682 1650.

Figure 2.1 APT, Lindsey Oil & Humber Refineries

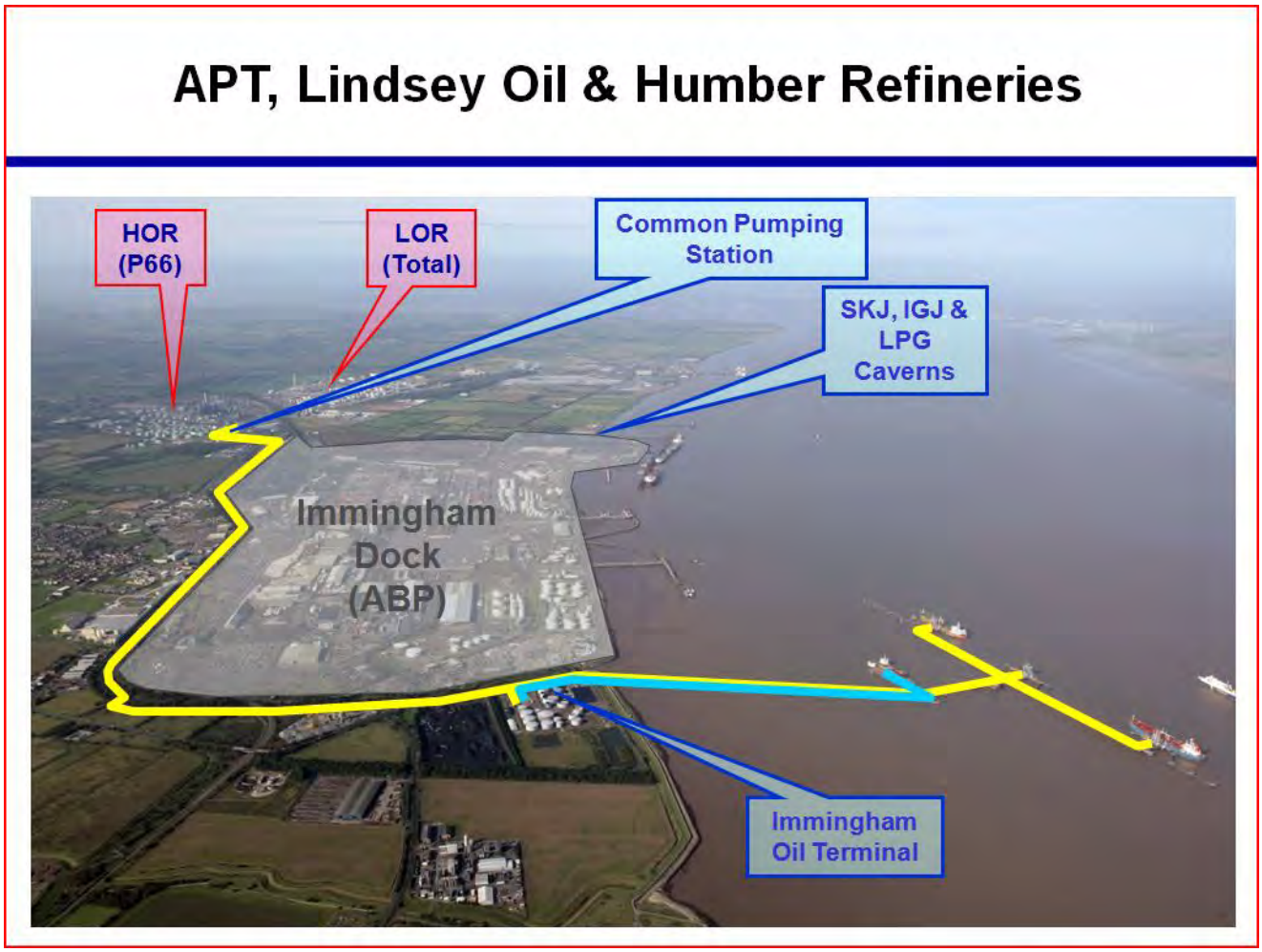
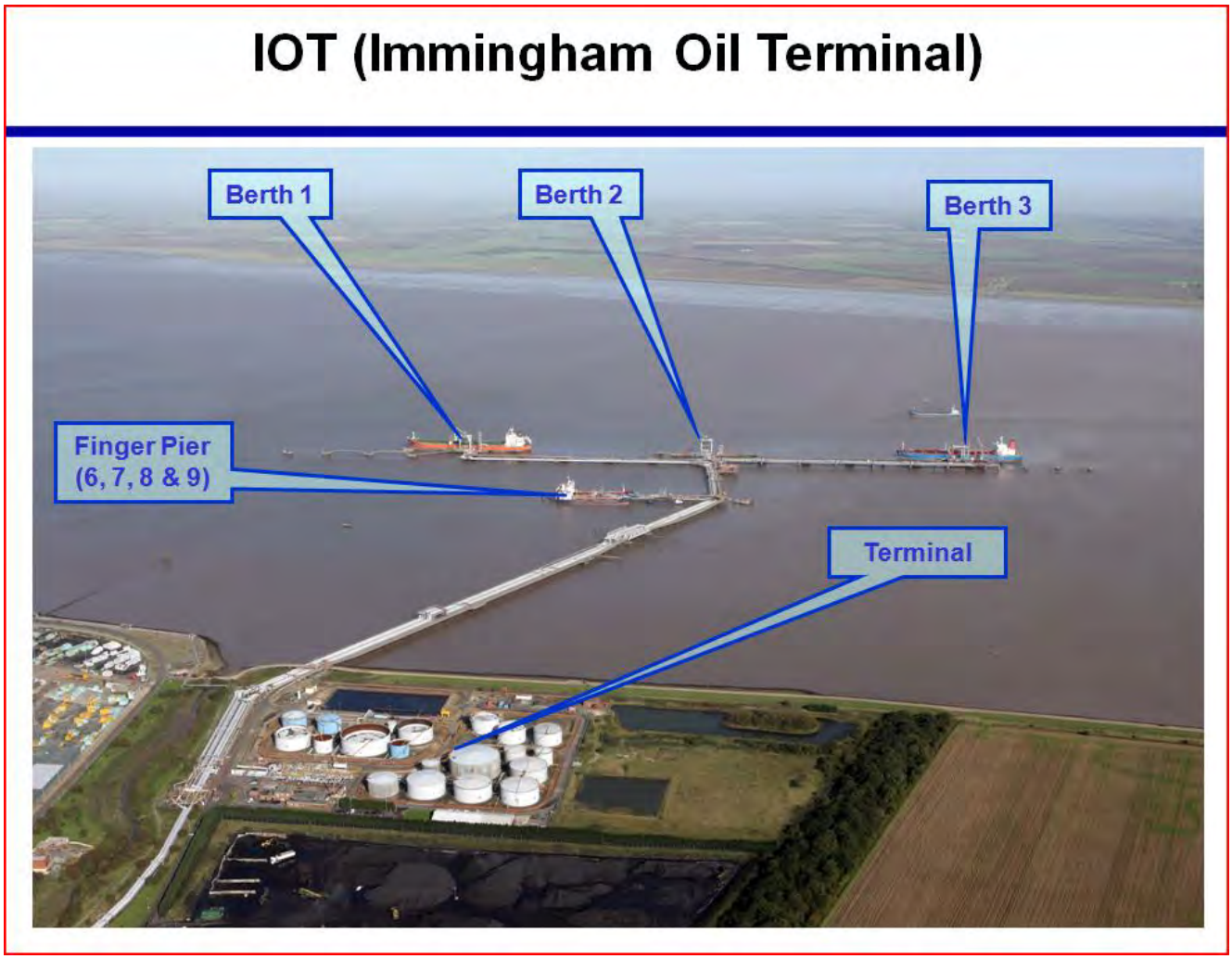


Figure 2.2 IOT (Immingham Oil Terminal



IOT comprises of three main berths for large vessels and a Finger Pier with four berths designed for smaller vessels, mainly coastal traffic and barges. In addition, there is a terminal area, which includes an office block, oil storage tanks, an oil pump bay together with associated pipework, de-ballasting unit and a steam generating boiler house.

Pipeline connections are also available to Inter Terminals, Immingham Storage, an independent tank storage facility adjacent to the Immingham Oil Terminal.

The IOT site is a fully and constantly manned site operating 24 hours per day throughout the year.

Operations commenced at IOT in April 1969, with M.T. “Alexandre I” discharging 31,000 tonnes of Algerian Crude Oil to TLOR from Berth 2.

Traffic and vessel tonnage handled in 2018:

Throughput	~~21,312,~~291 18,993,199 tonnes
Vessels handled	~~2,~~146 1,690

9.8 REPRESENTATIVE SCENARIO RP1 - SHIP COLLISION WITH THE JETTY/BERTHS

9.8.1 APT Bowtie Diagrams

- B01 – loss of containment from jetty loading equipment;
- B02 – loss of containment from pipelines.

9.8.2 Definition

Ship collision with the jetty or berths could arise as a result of an errant vessel or gross manoeuvring error causing damage to the facilities leading to leaks from the ship(s) involved and or the jetty, pipelines/berths.

9.8.3 Hazard Assessment

An assessment of the potential for an impact from an errant vessel/tanker with the jetty/berths has been undertaken.

The historical record at APT has been compared with the generic ship collision frequency data derived from:

- Marine Incidents in Ports and Harbours in Great Britain, 1988 -1992, RG Robinson and AN Lelland, AEA/0253, AEA/CS/HSE-R1051, March 1996

- An assessment of oil tanker spills (1974 - 2000), Accidental Tanker Oil Spill Statistics, International Tanker Owners Pollution Federation Ltd, 2001. (ITOPF)

Collisions causing small spills have been ignored as these are not likely to cause major damage and are already accounted for in the berth spill frequencies i.e. bumps during mooring/manoeuvring, See Representative Scenario 2. The contribution of collision events to all events causing small releases (<7 te) is negligible (see *Table 9.1*). However, the likelihood of collisions can significantly affect the overall spill distribution for the larger leak categories, where ship collisions account for approximately ¼ of all major events.

The ship collision data derived from the ITOPF and Marine Incidents reports has been compared with historical experience at APT. The berths/jetty has experienced three serious collisions, one which caused the major spill in 1983, a more recent event, not involving an oil tanker but a passing bulk carrier, which damaged an unoccupied berth and did not lead to a spill and the most recent incident where an unmanned vessel due to be scrapped broke away from its moorings upstream of IOT before colliding with the jetty again no loss of containment was experienced during this incident. Over the 30 year period this equates to a 0.1 chance per year of a serious ship collision event. The frequency of spills for the jetty/berths area based upon the ITOPF/ Marine Incidents vessel collisions data has been estimated as:

Table 9.20 RP1 Spill Frequencies

Summary of Spill Frequencies for Representative Scenario RP1 (Spills per year)					
Description	**Spill Quantity**				
	0.1 - 1 te	**1 - 10 te**	**10 - 1000 te**	**> 1000 te**	**All Spills**
Impact from Docking or Errant Vessel	Low impact	Low impact	7.7×10^{-2}	2.7×10^{-2}	1.0×10^{-1}

It can be seen that the APT historical experience is in-line with the derived spill distribution for ship collisions, both indicating a 0.1 chance per year of a serious collision.

It should be noted that the spill distribution used for the berth spill scenarios RP2 already includes this ship collision contribution and as such no additional analysis is proposed here.

The consequences of such releases are also included as part of Representative Scenario RP2. In a serious collision there is a potential for some injuries to any person on the jetty/berth or on board the ship. Persons working on the berth are likely to see any approaching vessel on an impact course and escape along the berth/ jetty. The size of ships likely to be involved means that serious injury to those on board is unlikely.

9.8.4 Effects on People

The effects on people of this scenario are considered to be the same as those detailed in *Section 9.8.3.*

9.8.5 Effects on the Environment

An unignited spill would result in hydrocarbons being deposited into the estuary of the Humber. The rate of evaporation would be low as the substance is in contact with the sea.

Effects have been presented in *Section 11* – Environmental Risk Assessment, which includes oil spill modelling.

9.8.6 Escalation Potential

Should a release of hydrocarbon from any of the identified threats ignite, it has the potential to spread to the tanker. However, the tanker has fire-fighting equipment on board and there are fire fighting tugs on call to support both the berth's and the tanker's capabilities in suppressing a fire. The open nature of the jetty/berth areas and the nature of the liquid being handled means that a vapour cloud explosion (VCE) is not considered a credible hazard.

A spray release of sour crude oil could result in small quantities of H_2S being liberated. However the distances to DTL from such a release are less than the distance to the shoreline.

A large un-ignited hydrocarbon liquid spill could have a short-term environmental impact in the area.

9.8.7 Hazard Management Assessment

The berthing of all vessels at IOT is controlled by a well-established set of regulations, which include berthing and sailing "windows," mooring patterns and ship to shore communications with the Berthing Masters. All movements involving ships having a summer deadweight of 40,000 tonnes or over, or having a declared draft of 11.0 metres or more are subject to the Humber Passage Plan requirements, which in essence, stipulates when these vessels can arrive or sail from the IOT. Vessels navigating within the port limits of the Humber Estuary are required to have a local pilot, unless the Master is specifically exempt from this requirement for the actual vessel under his command. The Harbour Authority issues pilot Exemption Certificates for this purpose by examining

candidates for specific areas of operation. Mooring Masters are also put on board larger vessels prior to berthing to assist with the mooring operation (local knowledge). The Harbour Authorities operate a Vessel Traffic Service (VTS) control system, similar in some respects to an airport air traffic control system. The berths are also fitted with all the required navigational aids e.g. lights, foghorns, etc., which are inspected by Trinity House with fenders and breasting dolphins to cushion any impacts.

Passing distances from the berth are specified in official “Notice to Mariners.” This should ensure passing vessels do not get too close to the berths and the jetty infrastructure.

Harbour tugs are available to assist with the mooring and let go of larger vessels while a small work boat with pushing capability is used for the smaller vessels using the IOT Finger Pier. A stand-by tug is also available 24 hours a day 365 days a week should it be required in an emergency or during an abnormal situation where further tug assistance is required.

Tidal and weather restrictions are in place to ensure mooring and let-go of vessels is completed in suitable conditions.

APT has regular safety meetings with Humber Pilots and liaison meetings with the Harbour Authority giving an opportunity to share safety related information and concerns.

Charterers (the oil companies) also carry out vessel vetting procedures to ensure the vessel and its management meet acceptable requirements before they arrive.

APT has oil spill response equipment and contingency arrangements, which include shared local and national resources to deal with oil spills.

Overall, it is considered that APT have met all relevant marine standards and implemented sufficient checks and controls to reduce the risk of ship collision either due to mooring error or errant vessel, as is reasonably practicable and within their direct control.

9.9 REPRESENTATIVE SCENARIO RP2 - LEAKS OF HYDROCARBONS FROM THE JETTY LOADING EQUIPMENT

9.9.1 APT Bowtie Diagram:

- B01 – Loss of Containment from Jetty Loading Equipment

9.9.2 Definition

The hydrocarbons handled at the berths and jetties include crude oil, fuels oil and finished products (distillates and motor spirit) that could be released due to jetty loading failures/errors during berthing, unberthing and loading/discharging of tankers. In the event of a release this could present a fire hazard, if ignited - either on the berth or in the sea below. Alternatively, a spill into the sea could present an environmental hazard.

Some of the crude oils handled at the terminal contain hydrogen sulphide, if released under pressure in the form of a spray could diffuse as a vapour presenting a toxic cloud hazard.

Refer to the full set of control and mitigation measures represented on the APT Bowtie diagram B01 Loss of Containment from Jetty Loading Equipment.

9.9.3 Hazard Assessment

An assessment of the potential hazards/threats arising from tanker berthing and jetty pumping/transfer operations has been undertaken – updated during the bowtie review workshop, May 2019 (no significant change). These include:

- Mechanical failure of piping/hose/loading arm during transfer
- Failure of jetty loading equipment due to ship movement/breakaway
- Loss of containment of jetty loading equipment resulting from structural failure of the jetty
- Loss of containment of jetty loading equipment due to ship collision with jetty due to manoeuvring error
- Loss of containment of jetty loading equipment due to errant vessel collision with jetty
- Escalation of a ship based event to the jetty
- Loss of containment of jetty loading equipment due to operator error during sampling
- Errors during maintenance of jetty equipment
- Failure of jetty loading equipment due to human error – improper connection
- Failure of jetty loading equipment due to human error – connection to wrong manifold
- Ship routing error – over-pressurisation due to pumping against closed valves
- Acts of vandalism/terrorist action
- External impact – dropped swung objects
- External impacts including impacts from vehicles

The spill size distribution and frequencies have been estimated by combining the actual number of vessel movements for the IOT berths with generic spill data (see *Section 9.3.1*) for the berths. This data covers a wide range of failure mechanisms and is largely based on data relating to large oil tanker movements and as such should be reasonably representative of the IOT operations. The data covers the following activities:

- Operations
  - Loading/ discharging
  - Bunkering
  - Other operations
- Accidents
  - Collisions
  - Groundings
  - Hull failures
  - Fires and Explosions

The frequency of spills has been estimated for the various products as:

Table 9.20 RP2 Leak Frequencies

Summary of Leak Frequencies for Representative Scenario RP2 (leaks per year)						
Product Type	**Number of Vessel Visits per year**	**Spill Frequencies, per year by size**				**All Releases**
		0.1-1 te	**1-10 te**	**10 - 1000 te**	**> 1000 te**	
Fuel Oil	353	1.2×10^{-1}	2.6×10^{-1}	4.4×10^{-2}	8.7×10^{-3}	4.4×10^{-1}
Gas Oil	1531	5.3×10^{-1}	1.1	1.9×10^{-1}	3.8×10^{-2}	1.9
Motor Spirit	283	9.8×10^{-2}	2.1×10^{-1}	3.5×10^{-2}	7.0×10^{-3}	3.5×10^{-1}
Crude	138	4.8×10^{-2}	1.0×10^{-1}	1.7×10^{-2}	3.4×10^{-3}	1.7×10^{-1}
Other	22	7.6×10^{-3}	1.6×10^{-2}	2.7×10^{-3}	5.4×10^{-4}	2.7×10^{-2}
Totals	**2327**	**8.04×10^{-1}**	**1.72**	**2.87×10^{-1}**	**5.74×10^{-2}**	**2.87**

Specific release rate calculations have been undertaken to indicate the scale of the releases from the transfer lines based on the IOT operating flows and pressures and isolation times. This analysis (Table 9.2122) indicates that the scale of the spills possible fall within the generic distribution (Table 9.21) in providing additional assurance that this spill distribution is reasonably representative.

Table 9.21 RP2 Tanker Loading/Unloading Spill Size

Liquid spill size (kg) **Assuming Isolation Times of 1 min and 3.5 min**											
Operation		**Isolation Time, seconds**	**18" motor spirit/distillate pipeline**			**24" fuel oil pipeline**			**36" crude pipeline**		
Hole diameter, mm			**20**	**150**	**450**	**20**	**160**	**600**	**20**	**300**	**900**
Ship Unloading - fire or spill, within seconds	Pumping	60	478	15000	15000	552	25000	25000	509	79333	79333
	Static Head		100	5609	50480	133	8509	119660	113	25427	228844
Ship Loading - fire or spill, within minutes	Pumping	210	1672	52500	52500	1930	87500	87500	1780	277667	277667
	Static Head		349	19631	176681	465	29781	418800	396	88995	800955
Maximum locked in inventory able to leak (kg)			185000			304000			837000		

Spills of hydrocarbons at the berth could ignite to form pool or running fires on the berth and on to the sea. The size of the fires on the berth and jetties will be limited by the physical dimensions of these facilities, which are narrow, ~10 m or less across. Large fires are therefore unlikely to develop. Ignited material falling on to the sea could sustain a sea pool fire, but this would quickly burn itself out once the source of the leak had been isolated. Thin layers of oil or hydrocarbons already on the sea are unlikely to ignite due to the cold sea temperatures.

An indication of the frequencies of fires can be gained from the ITOPF data which shows that approximately 2% of all events were due to fires or explosions (mainly within or on the ships themselves).

An alternative method of assessing the fire frequency is to apply the Cox, Lees and Ang ignition probabilities Table 9.11 to the release frequencies for the various materials at the berths.

The results of the analyses adopting these two approaches is shown in Table 9.22. The results from the two approaches are almost identical.

Table 9.22 RP2 Fire Frequencies

ITOPF based Fire Frequencies						
Total Fire Frequency	2%	1.61×10^{-2}	3.45×10^{-2}	5.74×10^{-3}	1.15×10^{-3}	5.74×10^{-2}
Fire Frequencies, Applying ignition probability data from Cox, Lees and Ang, assuming major leak rate						
Product Type	P ignition	0.1-1 te	1-10 te	10 - 1000 te	> 1000 te	All
Motor Spirit / Crude	0.08	1.16×10^{-2}	2.49×10^{-2}	4.16×10^{-3}	8.31×10^{-4}	4.16×10^{-2}
Gas Oil / Other	0.008	4.29×10^{-3}	9.20×10^{-3}	1.53×10^{-3}	3.07×10^{-4}	1.53×10^{-2}
Fuel Oil	0.0008	9.76×10^{-5}	2.09×10^{-4}	3.48×10^{-5}	6.97×10^{-6}	3.48×10^{-4}
Total Fire Frequency		1.60×10^{-2}	3.43×10^{-2}	5.72×10^{-3}	1.14×10^{-3}	5.72×10^{-2}

A discharge, in the form of a spraying jet of liquid has the potential to ignite should a source of ignition be located in the area of release. Sprays are only likely to develop with small hole sizes where the edge effects can generate spray, and are more likely to occur with the more volatile motor spirit and crude oil products. The hazard range is primarily a function of the hole diameter, rather than the flow rate or pressure. Distances to LFL for various hole diameters considered capable of causing spray releases are tabulated below.

Table 9.23 RP2 Pipework Liquid Jet Hazard

RP2 - Ranges to LFL, (m)		
Hole Diameter, mm	**1.0**	**5.0**
Range to LFL, m	0.87	6.5

The release flow rates associated with these small leak sizes are under 1 kg/s, which from the ignition probability data presented in Table 9.11, indicates a probability of ignition of less than 0.01.

In practice, these small spray releases are only a sub set of the small spill releases and fire events at the berths (i.e. those in the 0.1 to 1 te range). From the analyses presented in Table 9.22 , it is concluded that the frequency of these events will be less than 1.0×10^{-2} per year, and so these are taken to be included within the overall fire frequency estimates from Table 9.22 .

If the berth was transferring crude oil at the time of the release and did not ignite initially, the spray could result in H_2S diffusing out of the oil and possibly presenting a toxic hazard to personnel. The assessment is based upon a maximum sulphur concentration within the crude oil of 3% with the assumption that 10% of this is liberated as H_2S in a release. In practice, much of this sulphur in the oil may be present as other sulphides or mercaptans, not H_2S. An analysis of some typical sour crudes handled at the site indicates a concentration of less than 0.1% H_2S in the crude. Any free H_2S would have vaporised during transit. The assumption that 10% of the H_2S in the oil could be released is based on an assessment of H_2S evolution from crude oil which concluded that any significant H_2S disengagement from the oil is most likely to occur under conditions of mixing turbulence or impact, and that this would be largely determined by any spray or aerosol formation at the edge of a release

where the fluid interacts with the containment edge. The fraction of oil becoming spray depends on the hole size, shape and other factors, but in general, the smaller the hole, the larger the fraction of spray. In a major leak from a ship transfer coupling or ruptured pipework, the fraction of liquid coming off as aerosol is likely to be very small, perhaps less than 1% of the total release rate since the bulk of the flow is well away from the edge of the leak site. Hole sizes of the order of a few millimetres are typically associated with large spray fractions. The 10% spray fraction is taken as being conservative for a large oil leak during offloading. Two scenarios have been modelled, a small 20 mm hole in the transfer system and a major release, at the maximum pump transfer rate. Assuming a 3% H_2S concentration in the oil, which is significantly more than typical values, this equates to a pump maximum release of H_2S of 3.97kg/s. Using a more realistic 0.1% H_2S in oil concentration, gives a maximum release of 0.13 kg/s.

Recent Ekofisk Crude and Mexican Mix Crude assays show 80% wt and 92% wt of their respective sulphur contents comes out above 145 º C so this cannot be H_2S. This would bring the absolute max H_2S levels to 0.04%wt in Ekofisk and 0.24%wt in Mexican. Data available for Maya, the heavier component of Mexican Mix Crude, shows sulphur and H_2S content significantly below these figures and a conservative best estimate of 0.1% has also been used in the modelling.

The analysis, using DRIFT, produced the following results based on a typical time to stop the ship export pump of approximately 1 minute).

An indication is also provided in the table below to show the hazard ranges given the more realistic 0.1% H_2S concentration in the crude oil which is much more likely to represent the worst case scenario. In none of the cases would measured hazard reach the shoreline.

Table 9.24 RP2 Jetty H_2S Release During Tanker Operations

RP2 - H_2S Spill Down Wind Hazard Ranges (m)						
Spill at Maximum Pumping Rate		**H_2S Release Rate** (kg/s)	**SLOD** (1.5 x 10^{13} n = 4)	**SLOT** (2 x 10^{12} n = 4)	**LC50** (NIOSH 650 ppm)	**40 ppm**
Assuming 3% H_2S in crude (Worst Case, Very Pessimistic Estimate)						
D5 Weather Stability	20 mm Hole	0.03	37	49	67	290
	Max. Pump Rate	3.97	460	590	880	3000
F2 Weather Stability	20 mm Hole	0.03	78	100	160	600
	Max. Pump Rate	3.97	550	730	930	3500
Assuming 0.1% H_2S in the crude (Conservative Best Estimate)						
D5 Weather Stability	Max. Pump Rate	0.13	92	121	146	625
F2 Weather Stability	Max. Pump Rate	0.13	204	268	378	1440

The frequency of hydrogen sulphide vapour/aerosol releases has been calculated from IOT data which indicates that 2.4% of the crude oils handled are Class I H_2S containing <500ppm H_2S in the cargo vapour space, and 33% of the crude oils handled are Class II H_2S containing between 10 and 499ppm H_2S in the cargo vapour space.

Table 9.25 RP2 H_2S Release Frequencies

Product Type	Vessels per year	Spill Frequencies, per year by size				
		0.1-1 te	1-10 te	10 - 1000 te	> 1000 te	All
All Crude Movements	138	4.8×10^{-2}	1.0×10^{-1}	1.7×10^{-2}	3.4×10^{-3}	1.7×10^{-1}
H_2S Crude (Class I)	3	1.2×10^{-3}	2.5×10^{-3}	4.1×10^{-4}	8.2×10^{-5}	4.1×10^{-3}
H_2S Crude (Class II)	46	1.6×10^{-2}	3.4×10^{-2}	5.6×10^{-3}	1.1×10^{-3}	5.6×10^{-2}
All H_2S	49	1.7×10^{-2}	3.6×10^{-2}	6.0×10^{-3}	1.2×10^{-3}	6.0×10^{-2}
H_2S quantity released, te Assuming 10%of H_2S vaporises		0.003	0.03	3.00	30.00	

The frequency and consequence analyses for the releases of H_2S at the berths suggest that:

Small escapes of low concentration H_2S from Class II cargos could occur at a frequency of approximately 6×10^{-2} per year. These would only present a risk to persons on the berths close to the release point.

Small escapes of higher concentration H_2S from Class I cargos could occur at a frequency of approximately 4×10^{-3} per year. These would only present a risk to persons on the berths within 40-100 m of the release point.

Major releases of sour crude associated with high turbulence release conditions could generate substantial vapour clouds which could extend some 200m to SLOD and 300m to SLOT (based on the best estimate of the concentration of H_2S in the crude). These hazard ranges do not extend onshore but could pose a risk to all persons on the berths and jetty or to passing ships crews depending on the wind conditions and direction. Major leaks of this type could occur at a frequency of approximately 4×10^{-4} per year.

9.9.4 Effects on People

The population at the tanker berths is a maximum of 12 persons during docking and undocking operations, 7 of which are present during 15% of 24 hours, and 5 for 5% of the 24 hours. This applies to berths 1, 2 and 3. The finger pier population is 6, with 3 being present for 20% of 24 hours, and 3 for 9% of 24 hours. When pumping operations commence during loading/unloading the berth population is a maximum of two at the berth itself with a watchman on the ship.

A release of a hydrocarbon onto the berth during mooring operations is perceivable.

A release during pumping operations could produce a localised hydrocarbon pool in the berth area with the potential to ignite. There may also be some liquid spray, which could also ignite. At worst, one or two people could be in the immediate vicinity and be burnt by the fire if this ignited almost instantaneously. If the leak did not ignite straight away, those nearby should be able to escape to safety along the berth/ ship. Persons not close to the release point e.g. the watchman on the ship and the jetty operator in the control cabin are unlikely to be affected, and these would initiate any isolation and fire fighting actions required. The area has foam monitors to quickly extinguish a release.

A release of sour crude oil during an export transfer could result in a spray, which could liberate H_2S in hazardous quantities. Table 1-25 shows the maximum range to the Dangerous Toxic Load (SLOT) is 268 m in F2 weather conditions for a maximum pump limited release (based on the best estimate of the concentration of H_2S in the crude). This would affect persons located at the berths but would not extend to the shore. However, special procedures and arrangements are in place when transferring

sour crude because of the H_2S risks. The berthing area has a number of fixed H_2S detectors to warn of a release and personnel carrying individual H_2S detectors as a supplement to the fixed detectors. Should the alarms sound, the berthing area personnel have access to BA and escape sets. All personnel are fully trained in the use of this equipment. The berth operators connecting and disconnecting transfers, and checking and controlling the transfers, carry an escape set with them when sour crude is being handled. The ship based operator has similar provisions.

All main berths at IOT have escape breathing apparatus sets located in the berth huts. The berth operators are trained in their use. This was introduced following the latest Occupied Buildings Risk Assessment (2017), see *Section 10* for full details.

It is therefore considered unlikely that anyone would be sufficiently overcome to receive a fatal dose of H_2S, but one or two persons close to the release point may suffer severe health effects in a major event if they could not put on breathing apparatus or evacuate themselves quickly enough.

There is also a small risk that persons on passing vessels could be affected by a drifting cloud of H_2S from a major leak. The strong odour of the vapour should provide a warning, but this can be cancelled out at higher concentrations. Those persons inside the ship are unlikely to be affected, as the ship would quickly pass through the relatively narrow cloud (cloud <100 m wide to SLOT contour).

9.9.5 Effects on Environment

An unignited spill would result in hydrocarbons being deposited into the estuary of the Humber. The rate of evaporation would be low as the substance is in contact with the sea.

Effects have been presented in *Section 11* – Environmental Risk Assessment, which includes oil spill modelling.

9.9.6 Escalation Potential

Should a release of hydrocarbon from any of the identified threats ignite, it has the potential to spread to the tanker. However, the tanker has fire-fighting equipment on board and there are fire fighting tugs on call to support both the berth's and the tanker's capabilities in suppressing a fire. The open nature of the berth areas and the nature of the liquid being handled means that a vapour cloud explosion (VCE) is not considered a credible hazard.

A spray release of sour crude oil could result in small quantities of H_2S being liberated. However the distances to DTL from such a release are less than the distance to the shoreline.

A large un-ignited hydrocarbon liquid spill could have a short-term environmental impact in the area.

9.9.7 Hazard Management Assessment

The berthing facilities at IOT use both hard arm and hose transfer systems. All transfer lines on the IOT site are fitted with remote operable isolation valves, which can be activated locally, from the berth control cabin, or from the main control room. The berths are bunded and have high capacity drains leading to collection slop tanks able to catch small to medium spills (several tonnes).

All mooring and product transfer operations are fully supervised by both ship and berth personnel. The transfer lines are tested and inspected at regular intervals. Any leaks or fire should be detected quickly and the transfer stopped.

All berths have installed fire-fighting equipment including remote operable water and foam monitors and jetty protection sprays/ deluges. Fire fighting tugs are also on standby 24 hours a day.

Pollution oil spill contingency plans and arrangements are in place to deal with any oil spill, from small to major.

Special arrangements are in place when handling sour crude oil cargos. There are fixed H_2S detectors at the relevant berths and personnel carry personal lapel monitors/ alarms. Breathing Apparatus (BA) sets and escape sets are available for use in a toxic event, and all personnel are trained in the use of this equipment.

The location of the berths, 1 km from land mean that even a major fire or toxic H_2S vapour from large sour crude releases will not present any significant risk to onshore areas.

The full set of control and mitigation measures are represented on the APT Bowtie diagram B01 Loss of Containment from Jetty Loading Equipment.

9.10 REPRESENTATIVE SCENARIO RP3 - LEAKS OF HYDROCARBONS FROM PIPELINES ALONG THE JETTY

9.10.1 APT Bowtie Diagram

- B02 – Loss of Containment from Pipelines

9.10.2 Definition

Crude oil, fuel oil and finished products (distillates and motor spirit) could be released due to pipeline failures along the jetty. In the event of a release this could present a fire hazard, if ignited - either on the decking or in the sea below. A spill into the sea would present an environmental hazard.

Certain crude oils contain quantities of hydrogen sulphide that upon release as a spray could diffuse as a vapour presenting a toxic cloud hazard. The consequences of this scenario would be similar to those of Representative Scenario RP2.

9.10.3 Hazard Assessment

An assessment of the potential hazards/threats arising from tanker berthing and jetty pumping/transfer operations has been undertaken – updated during the bowtie review workshop, May 2019 (no significant change). These include:

- Internal corrosion/erosion
- External corrosion/erosion
- Gasket/seal failure or failure of instrument connection
- External impact by dropped/swung objects
- External impact by vehicles
- Third party operations next to pipelines
- Overpressurisation including thermal effects
- Overpressurisation due to pumping against closed valve – centrifugal pumps
- Overpressurisation due to pumping against closed valve – Humber Refinery PD pump
- Material in pipeline above maximum operating temperature
- Ship collision with jetty due to manoeuvring error
- Ship collision with jetty due to errant vessel
- Act of vandalism or terrorism

The frequency of pipeline failure for the various products has been estimated from pipeline generic failure data adjusted for the time the pipelines are at pressure. Since it may be argued that many of the leaks would arise whilst the pipeline is pumping at pressure, the fraction of the leak frequency assumed during pumping has been taken as twice the fraction of the time the line is operating at pressure, with an upper limit of 90% of all leaks occurring when at pressure for a pipeline system only in intermittent use. The resulting leak frequencies are:

Table 9.26 RP3 Failure Rate Data for Berth to Shore Pipework

Summary of Frequencies for Representative Scenario RP3 (Leaks per year)									
Pipeline	**When at Pressure**			**When Not at Pressure**			**Total All Conditions**		
	Pinhole Crack	**Hole**	**Rupture**	**Pinhole Crack**	**Hole**	**Rupture**	**Pinhole Crack**	**Hole**	**Rupture**
Crude 36 inch (import)	3.9×10^{-4}	3.1×10^{-4}	9.5×10^{-5}	2.3×10^{-4}	1.8×10^{-4}	5.7×10^{-5}	6.2×10^{-4}	4.9×10^{-4}	1.5×10^{-4}
Fuel Oil 22 inch / 24 inch	5.0×10^{-4}	4.0×10^{-4}	1.2×10^{-4}	1.1×10^{-4}	9.1×10^{-5}	2.8×10^{-5}	6.2×10^{-4}	4.9×10^{-4}	1.5×10^{-4}
Motor Spirit 18 inch (export)	2.8×10^{-4}	2.2×10^{-4}	6.8×10^{-5}	3.1×10^{-5}	2.5×10^{-5}	7.6×10^{-6}	3.1×10^{-4}	2.5×10^{-4}	7.6×10^{-5}
Distillate (Gas Oil/ Kerosine) 18 inch	5.6×10^{-4}	4.4×10^{-4}	1.4×10^{-4}	6.2×10^{-5}	4.9×10^{-5}	1.5×10^{-5}	6.2×10^{-4}	4.9×10^{-4}	1.5×10^{-4}
Overall Totals	**1.7×10^{-3}**	**1.4×10^{-3}**	**4.2×10^{-4}**	**4.4×10^{-4}**	**3.5×10^{-4}**	**1.1×10^{-4}**	**2.2×10^{-3}**	**1.7×10^{-3}**	**5.3×10^{-4}**

'Pinhole cracks' are defined as being 20mm or less in diameter, 'holes' are between 20mm and 0.5 of the pipeline diameter and 'ruptures' are holes greater than 0.5 times the pipeline diameter.

Note that approximately 33% of the crudes handled contain some H_2S, but only about 2.4% are classed a Class I crudes with concentrations above 500 ppm in the tanker ullage. An estimate of the frequency of leaks involving sour (H_2S) crude is given in Table 9.29 .

The pipelines within the IOT site and jetty are large and above ground and they are all within a controlled area, so inadvertent impact is unlikely. The large size and robustness of the pipelines means that an impact event may not necessarily lead to a leak. In particular, the pipelines along the jetty are over the water and are not readily accessible. Pipeline impact is therefore very unlikely and the generic data may be overly conservative in this respect. The main credible threat to the pipelines in this area would be a ship collision, such as a large errant/ rogue vessel colliding with the jetty. This could cause major damage and is likely to lead to some pipeline spillage. The likelihood of ship impacts has been considered in RP1. This indicates an impact frequency of approximately 0.1 per year, however most of these would be associated with "heavy" landings during berthing and manoeuvring operations at the berths. Direct ship collisions involving the jetty structure would be much less likely.

The assessed flow rates from the pipework for various leak sizes is tabulated in Table 9.27 . The release rates are limited by the maximum pumping rate for the line.

Table 9.27 RP3 Mass Release Rates

Mass Release Rates, kg/s, from Berth to Shore Pipework				
Liquid Release Rate, kg/s	**Release**	**Hole Diameter, mm**		
		20 mm	**0.33 D**	**D**
Crude 36 inch (import)	Under Pressure	8	1332	1332
	Liquid Head	2	424	3814*
Fuel Oil 24 inch	Under Pressure	9	417	417
	Liquid Head	2	142	1994*
Motor Spirit 18 inch (export)	Under Pressure	8	250	250
	Liquid Head	2	93	841*
Distillate (Gas Oil/ Kerosene) 18 inch	Under Pressure	8	250	250
	Liquid Head	2	93	841*

* Table Note - these are peak theoretical instantaneous rates which would rapidly drop as the pipeline loops drained, **'D'** = Nominal pipeline diameter

An indication of the possible range of spill sizes is given in Table 9.28 based on the initial release rates and or pumping rates, and typical times for detection and isolation. Any significant fire or spill would be detected quickly, especially if near the berth or tank farm area. Smaller spills from the pipe runs along the jetty may not be detected for some time, especially at night. The quantities shown for leaks when the pipelines are not pumping (static head) could be conservative since the pipeline loops may limit the inventory available to leak to that below the total pipeline inventory. In practice, the spill quantity in these cases is likely to be less than the pipeline locked in inventory.

Table 9.28 RP3 Pipeline Spill Sizes

Liquid spill size (kg) **Assuming Isolation Times of 1, 5 and 30 min**											
Operation		**Isolation Time, seconds**	**18" motor spirit/distillate pipeline**			**24" fuel oil pipeline**			**36" crude pipeline**		
Hole diameter mm			20	150	450	20	160	500	20	300	900
Pipeline - fire or spill, within seconds	Pumping	60	478	15000	15000	552	25000	25000	509	79333	79333
	Static Head		100	5609	50480	133	8509	119660	113	25427	228844
Pipeline - fire or spill, within minutes	Pumping	300	2388	75000	75000	2758	125000	125000	2543	396667	396667
	Static Head		499	28045	252402	665	42545	598285	565	127136	1144221
Pipeline - large spill, within minutes	Pumping	1800	14330	450000	450000	16547	750000	750000	15255	2380000	2380000
	Static Head		2991	168268	1514410	3989	255268	3589700	3390	762814	6865325
Maximum locked in inventory able to leak			185000			304000			837000		

The consequences of leaks from the pipelines would be similar to that from leaks from the berths as described in RP2. Liquid sprays and pools could affect the section of the jetty adjacent to the pipeline leak point, causing pool fires or spray fires if ignited. However the chance of ignition is very low given the open location of the pipelines away from sources of ignition. A short section of the pipeline corridor onshore runs close to the pump bay. The pipelines are in a sunken corridor and the nearest edge of pump bay is some 20 m away beyond the raised access roadway. It is therefore, unlikely that significant quantities of liquid from the pipelines would reach the pump bay, except in a major leak, whilst pumping along the pipeline. However, other pipelines could be at risk from a fire from an adjacent pipeline.

The frequencies of fires are likely to be low. An analysis of onshore pipelines in the USA quoted in HSE Contract Research Report 206/1999 Risk from gasoline pipelines in the United Kingdom, HSE Books 1999, ISBN 0 7176 1684 3 (US DoT data) suggests ignition probabilities of approximately 2% for oil, gas oil and fuel oil pipelines and 6% for motor spirit pipelines. These values are likely to be conservative for the IOT pipelines given their location in an open area away from sources of ignition. Combining these ignition probabilities with the leak frequencies in Table 9.29 gives the following fire frequencies:

Table 9.29 RP3 Pipeline Leak and Fire Frequencies, per year

	Pinhole Crack	**Hole**	**Rupture**	**Total**
Leaks	2.16×10^{-3}	1.72×10^{-3}	5.29×10^{-4}	4.41×10^{-3}
Leaks with H_2S	2.04×10^{-4}	1.62×10^{-4}	4.99×10^{-5}	4.16×10^{-4}
Fires	5.56×10^{-5}	4.42×10^{-5}	1.36×10^{-5}	1.13×10^{-4}

Major leaks and fires from the pipelines on site and along the jetty should be detected quickly, especially as these would affect the transfer rates. In an incident all the pipeline transfers would be stopped by calling the ship/refinery control room. This would quickly depressure the lines and limit the extent of any leak and fire. All pipelines have remote operated isolation valves at the IOT site boundary and these could also be shut if needed. ~~All other pipelines have manual block valves at the~~

~~same location, allowing the onsite pipeline sections to be isolated from the inventories in the cross-country sections to the refineries~~.

If necessary, storage tank deluge systems and fire monitors could be used to protect equipment in the pump bay and storage area from thermal fire hazards from a pipeline leak and fire. Foam and/ or fire-fighting water could also be applied to the pipeline sections onshore if required to either prevent a fire or fight an existing fire.

The main risk from a pipeline leak would be from a leak along the jetty over the estuary. This could result in oil or other hydrocarbon products entering the sea causing pollution.

A small leak could go undetected for several hours, especially at night when it would be difficult to see the leak or the oily sheen on the surface of the water (see *Section 11* this report for an example).

In a major leak, the pipeline should be shutdown quickly. Given pumping rates of between 400 and 1300 kg/s, these could equate to a spill of 120-390 tonnes over a 5 minute period (typical time to detect the leak and stop the pumps)

The inventories of the pipelines on site are approximately 200 te for the 18" distillate and motor spirit lines, 300 te for the 20" fuel oil line and 800 te for the 36" crude oil lines. Not all of this would leak out in an incident due to the pipeline loops along the line.

Small leaks could be patched if safe to do so.

9.10.4 Effects on People

Leaks and fires associated with pipelines are unlikely to directly affect the normal working areas and offices. Most sections of the pipelines run in a corridor well away from working areas. The number of people along the jetty is limited to those traversing to/from the shore from/to the berth areas. At worst, a few people walking past or driving past the leak site could become engulfed in a fire if the leak ignited at the time they were passing (a vehicle might provide a source of ignition, but note that many of the materials being transferred have high flash points). A vehicle would offer some protection from a flash fire or associated thermal radiation.

Should a release of sour crude oil result in the evolution of H_2S then access to the berth areas along the jetty may be restricted. However, there are several boat landing areas on the jetty from which escape is possible, and there are BA sets and escape sets at the berths for use in toxic incidents.

Should a release occur the pumps could be shutdown quickly depressurising the pipelines and limiting the release.

9.10.5 Effects on Environment

The effects on the environment would be as for the previous scenario, RP1 and further assessment of the environmental effects of this scenario are detailed in *Section 11* – Environmental Risk Assessment.

9.10.6 Escalation Potential

Should the release ignite, it could restrict access to the berths area. However, there are alternative methods of access and egress, including boat landings on the berths. Fires along the jetty are unlikely to escalate to either the berthed tanker or the IOT site due to the large distances involved. Fire-fighting tugs would be brought in to help deal with any major fire along the jetty and the berths have their own extensive fire-fighting capability.

A fire from one pipeline could impinge on an adjacent line, however the low pressure liquids involved and the fact that all lines contain liquid, even when not pumping, means that it would take some time for the pipeline to fail in a fire. The only realistic situation for fire impingement would be a spray fire on to an adjacent pipeline along the jetty or a spray or pool fire in the pipeline corridor trench on the short onshore section of the route. A Guide to Quantitative risk Assessment of Offshore Installations, CMPT, 1999 (ISBN 1 870553 365) Table V.3.10 quotes times to failure in hydrocarbon pool fires for process systems such as piping of 10 to 60 minutes based on 200 kW/m^2 to 37.5 kw/m^2 fluxes respectively. The pipelines should have been depressured by stopping the transfer pumps well within this timeframe, so the chance of escalation by this path is very small. Even if a second line were to rupture, this would only provide a limited supply of liquid at ambient pressure to feed the fire. On the jetty, this would fall to the sea, but a leak in the onshore section of the pipeline corridor could form a pool fire under adjacent lines.

The open nature of the jetty and pipeline corridor means that a significant VCE from a pipeline leak is not credible.

A spray release of sour crude oil could result in small quantities of H_2S being liberated. However the distances to dangerous toxic loads (DTLs) are such that it would only have a local effect and is unlikely to affect populated areas. Stopping the transfer pumps would quickly depressure the line, preventing further generation of H_2S aerosol or vapour.

A large spill in to the sea could have a short-term environmental impact in the area, but is unlikely to cause any escalation.

9.10.7 Hazard Management Assessment

The pipelines along the jetty are located in a protected corridor and are manufactured to the appropriate specification and standards. A ship collision could breach the pipework which could lead to a release, but this would have to be a major impact to damage the jetty and pipeline supporting structures. Conversely, there could be a small release due to corrosion which may continue undetected for a few hours, especially at night. However, the pipework is inspected at regular intervals to check for possible corrosion.

Should a release of crude oil result in the dissolution of H_2S then access to the berth areas along the jetty may be restricted. However, there are several boat landing areas on the jetty from which escape is possible.

The number of people along the jetty is limited to those traversing to/from the shore from/to the berth areas. Vehicles are used to transport people and equipment to and from the berths, but access is restricted with all vehicles having to pass through the IOT security gate. No smoking or other sources of ignition are allowed on site unless covered by the permit to work system.

Should a release occur, the pumps could be shutdown quickly depressurising the pipelines and limiting the release.

All pipelines are depressured when not actively being used for transfers. Leaks from these depressured pipelines are likely to flow into the pipeline corridor onshore or in to the sea along the jetty (the main part of the pipeline corridor).

Deadline 7 Appendix 5

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
IOT Operators / ABP – Without Prejudice email exchanges regarding Action Point 5 from ISH5

Tom Gray

From: Alex Minhinick
Sent: 21 November 2023 18:20
To: 'Greenwood, Brian'
Cc: WALKER Angus [redacted]
Subject: IOT / APT vessel movements [Burges-WORK.FID10356350]

Brian

With a view to collaborating to inform the graphic the parties have agreed to prepare for the ExA on vessel movements on a worst case day, I wanted to let you have IOT / APT's inputs. These fall into three categories:

1. Tanker movements to IOT / APT's outer berths – berths IOT 1, 2 and 3. These are all tidal movements. In a worst case scenario, one tanker be leaving the outer berth as another is arriving. This occurs several times a week. There is a need to ensure tug and pilot availability is in place before the arriving vessel starts her final approach to the IOT. During that period, it would not be possible for a RoRo to be stemming / waiting in the area adjacent to the IOT berths. We re confident ABP / HMH will be familiar with the detailed requirements of these movements, and areas in question. But we can provide more detail if that is required.

2. Coaster movements to and from the IOT Finger Pier. These are also tidal movements that only occur on the flood tide.

3. Barge movements to and from the IOT Finger Pier. These can occur at any time, provided prevailing environmental factors are within tolerances.

You will appreciate that 16.8.64 of your ES says:

> 16.8.64 During consultation, APT raised concerns about commercial impacts such as delays to arrivals or sailings of vessels as a result of increased vessel traffic activity from the IERRT project. However, it has been agreed that priority will be given to tidally restricted vessels (e.g., APT) in terms of scheduling and movements. This has been confirmed with the business and also with Humber Estuary Services.

All IOT vessels, other than barges, would fall within that description.

Kind regards

Alex

Alex Minhinick
Partner
Burges Salmon LLP

T: [redacted]

Legal Team PA: Kia Jarrett
T: [redacted]

[redacted]

Tom Gray

From: Olly Smith [redacted]
Sent: 08 December 2023 14:00
To: Joshua Bush; Matt Dearnley
Cc: Sophie Young; Greenwood, Brian; Alex Minhinick
Subject: RE: IERRT - ISH5 AP5
Attachments: FW: IOT / APT vessel movements [Burges-WORK.FID10356350]

Good afternoon, Josh.
We have already sent your solicitor this information on the 21st November – see attached email.

When ABP is compiling this information, could you please clarify if it is for a historic specific day or rather as a general representation of the worst case of vessel movements to / from the IOT in a 24hr period? From our perspective, the most realistic & challenging 24hrs would include the below vessel movements on the Finger Pier and the main IOT berths (1/2/3):

IOT
Berth 1 HW PPV Departure & Arrival (same tide)
Berth 2 HW PPV Departure & Arrival (Same HW tide as above)
Berth 3 LW Sailing & Next HW Arrival

Finger Pier:
We frequently encounter multiple sailings to and from the IOT Finger pier berths every 24hrs with Berths 6 & 8 both changing over on each flood tide (usually at either the start or end of the flood).
Also, two barges arriving and departing from berth 9, these arrive & depart around the coasters, but obviously avoid the height of the tidal flows.

Looking through our records, we have never previously been impacted by shipping congestion around the terminal itself, the IOT has only experienced shipping delays due to:

- Weather Conditions (Visibility or Swell)
- Lack of Pilot availability
- Pilot boarding delays – causing vessels arriving too late for a tide
- Tug availability.

Kind regards
Olly Smith

Marine Superintendent
APT (Immingham) Ltd
Queens Road | Immingham | N E Lincolnshire | DN40 2PN
Tel: [redacted]

From: Joshua Bush [redacted]
Sent: Thursday, December 7, 2023 9:04 AM
To: Matt Dearnley [redacted]

Cc: Sophie Young [redacted]
Subject: IERRT - ISH5 AP5

Dear Matt and Olly,

ISH5 Action Point 5

I hope you are well. ISH5 Action Point 5 requires us to produce further narrative and graphic representations for a challenging day, with a extract below of the action. We have liaised with the Harbour Master and believe we have the relevant information to address the action. DFDS have also sent information to us in relation to the action. We are working this into a set of drawings and narratives which will be ready for submission for Deadline 7 on Monday. Notwithstanding this, if you do believe there is any further information we should be aware of, in line with the action below, please can you send this to us ASAP.

Kind Regards

Josh

5	Applicant, DFDS and IOT Operators	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 preparation of the graphic representations.	D7

Josh Bush | Project Development Manager | Associated British Ports
25 Bedford Street | London | WC2E 9ES
Mob: [redacted]

Deadline 7 Appendix 6

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
ABP Correspondence regarding Senior Safety Forum meeting

Tom Gray

From: Henrik Pedersen <[redacted]>
Sent: 24 February 2023 08:30
To: [redacted]
Cc: Simon Bird; Ben Hodgkin; Paul Bristowe
Subject: Senior Safety Forum: Immingham Eastern RoRo Terminal (IERRT) development

Dear all,

I am writing to you with regards to the Immingham Eastern RoRo Terminal (IERRT) development.

During the round of consultations held with a wide range of stakeholders which included HAZID workshops and simulations, there have been concerns raised by some of those attending regarding certain safety issues and challenges regarding the location and operation of the new terminal. These concerns have been reviewed by the ABP project team on an individual basis.

In order to develop an improved shared understanding of our respective positions I have asked Simon Bird to chair a 'Senior Safety Forum' in the region to consider and fully review the issues and planned mitigations. From ABP he will be supported by Ben Hodgkin (ABP Head of Projects), Paul Bristowe (Head of Marine Humber) and Andrew Firman (Harbourmaster Humber). Stena Line management will also attend with their two senior Captains who conducted the navigation simulations at HR Wallingford.

ABP is fully committed to the long term safe operation of all terminals and berths across the group; the aim of this forum will be to provide transparency for our key stakeholders around how we intend to incorporate the IERRT into Humber operations.

The meeting will be scheduled in the coming weeks and I would be most grateful if you were personally able to attend or to nominate a suitable senior colleague empowered to play an active role where the intention is to align and agree a way forward. Subsequently, and if necessary, Simon's regional team and the ABP project team will facilitate more detailed discussions to work through the detail.

I very much you will be able to support this meeting as we seek to address ongoing concerns regarding this important development in Immingham.

Regards,

Henrik L. Pedersen | CEO | Associated British Ports
25 Bedford Street | London | WC2E 9ES
Mob: [redacted]
EA: [redacted]

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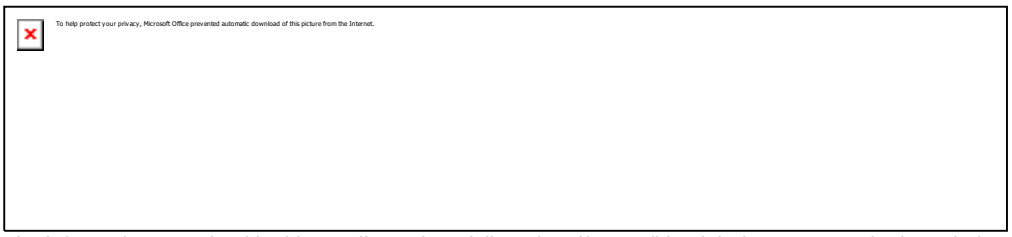

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Tom Gray

From: Emily Swain [redacted]
Sent: 23 March 2023 16:26
To: Matt Dearnley; Fursey, Paul; [redacted]; Kell Robdrup; Vlugt Marcel van der; Hellner Carl-Johan
Subject: RE: IERRT - Marine Operations Review

Good Afternoon

After a review of dates, it has been decided that this session will now take place on Monday 22nd May at 1300 in Immingham Dock Office

I will forward the official invitation across for your respective diaries

If we could kindly ask you to forward this invitation to the colleagues within your organisation you wish to attend

Many thanks in advance

Many Thanks

Emily Swain | Executive Support Manager | Associated British Ports
Tel: [redacted]

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[redacted]

From: Simon Bird [redacted]
Sent: Monday, March 20, 2023 4:38 PM
To: Fursey, Paul [redacted]
Cc: Paul Bristowe [redacted]>; Emily Swain [redacted]
Subject: IERRT - Marine Operations Review

Dear Gentlemen,

As you are aware ABP has submitted an application for a Development Consent Order to develop a new RoRo in Immingham. As part of this process there has been much engagement and consultation with stakeholders, customers and the wider port community which has included representatives from your companies. ABP is committed to listening to views and concerns that have been expressed about the proposed development in particular as they relate to marine operations. In this regard it is my intention to hold a meeting at 12.30 Thursday 27th April in Immingham Dock Office and to invite you along with your colleagues to attend. I will chair the meeting and my colleague, Paul Bristowe, Head of Marine, Humber, will present in detail the proposed development and how it is intended to operate. He will use the data from the many modelling sessions held at HR Wallingford with the intention to hear any comments or concerns and to seek to find solutions and mitigations. Paul will be joined by Andrew Firmin, Humber Harbour Master.

The planning process for this development is well underway. This meeting is very important and I would ask you to personally attend along with which ever colleagues you wish to accompany you, lunch will be provided.

I would be grateful if you would confirm your attendance along with participants.

I look forward to meeting you later next month,

Simon Bird | Director Humber | Associated British Ports
Hull - PO Box 1 | Port House | Northern Gateway | Hull | HU9 5PQ | Please use HU9 5NS for SatNav
Immingham - Dock Office | Immingham Dock | Immingham | DN40 2LZ
Grimsby - Port Office | Cleethorpe Road | Grimsby | DN31 3LL
Tel: [redacted]
All business transacted in accordance with ABP's Standard Terms & Conditions, printed in the annual tariff - available at: [redacted]

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[redacted]

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Tom Gray

From: Simon Bird [redacted]
Sent: 16 May 2023 12:13
To: Andrew Firman; Paul Bristowe; Matt Dearnley; Fursey, Paul [redacted] Vlugt Marcel van der; Hellner Carl-Johan [redacted]; Andrew Byrne
Cc: Ben Hodgkin
Subject: IERRT - Marine Operations Review (Lunch Included)

Dear Colleagues,

I am writing to advise that ABP is postponing the meeting above which was due to be held on Monday 22 May. A number of those attending now find the date to be difficult and without full attendees, it makes sense to postpone. Given the difficulties with diaries, which I completely understand, I will reach out to individual companies and look to organise separate meetings.

Kind regards,

Simon

Simon Bird | Director Humber | Associated British Ports
Hull - PO Box 1 | Port House | Northern Gateway | Hull | HU9 5PQ | Please use HU9 5NS for SatNav
Immingham - Dock Office | Immingham Dock | Immingham | DN40 2LZ
Grimsby - Port Office | Cleethorpe Road | Grimsby | DN31 3LL
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[redacted]

Deadline 7 Appendix 7

IOT Operators, Letter to ABP - 'RE: *Immingham Eastern Ro-Ro Terminal Development*

Document
IOT Operators Oral Summary of Submissions at ISH5 and ISH6

IERRT ISH5 and ISH6: The IOT Operators' Summary of Oral Submissions

This note summarises the submissions made by Associated Petroleum Terminals (Immingham) Limited ("**APT**") and Humber Oil Terminals Trustee Limited ("**HOTT**") (together the "**IOT Operators**") at Issue Specific Hearing 5 ("**ISH5**") and Issue Specific Hearing 6 ("**ISH6**") on 21, 22 and 23 November 2023 in relation to the Development Consent Order ("**DCO**") application for the proposed Immingham Eastern Ro-Ro Terminal Development ("**IERRT**"). This document does not summarise the oral submissions of other parties.

ISSUE SPECIFIC HEARING 5

1 AGENDA ITEM 2: NAVIGATION AND SHIPPING

1.1 The ExA noted an absence of records for the safety review and cost benefit analysis meetings. At this point both DFDS and the IOT Operators raised issues regarding transparency from the Applicant.

1.2 The IOT Operators stated the concern is not just with the cost-benefit analysis of the finger pier relocation but with protective measures more broadly.

1.3 The IOT Operators provided a summary of the IOT Operators' main concerns about the applicant's Navigational Risk Assessment (NRA), specifically highlighting the lack of transparency and detail in the cost-benefit analysis, the justification for risk thresholds and control measures, and questioning the methodology used, noting inconsistencies with previous submissions. Dr Rogers further pointed out that the IOT Operators have not received adequate information regarding the resilience of the proposed IERRT infrastructure to impacts or the protection of the IOT's Trunkway, among other critical details.

1.4 The ExA raised, supported by DFDS and the IOT Operators, concerns about the ambiguity of control measures as proposed by the Applicant.

1.5 The ExA sought further clarification on the separation of the Applicant and the Harbour Master Humber beyond statutory requirements. This questioning was supported by DFDS and the IOT Operators who noted the concern regarding structural independence and, if there are adjudications to be made, whether those are undertaken independently where there is a dispute.

1.6 The IOT Operators disputed the Applicant's interpretation of the Rochdale analysis and emphasised the need for an acceptable assessment at the root consent stage. The Rochdale approach allows the consenting of a project up to the maximum parameters that have been assessed and which impacts and implications are acceptable, noting that this is then restricted by conditions. The IOT Operators then stressed that the impacts of those maximum parameters have to be assessed as being acceptable at the stage when the root consent is granted - the Applicant cannot leave over the assessment of acceptability to a future stage. As seen in previous cases a deviation from that approach leaves an unlawful proposal.

1.7 Regarding the Applicant's letter [AS-020], the IOT Operators explained that:

(a) paragraph 1 of the letter [AS-020] that the IOT Finger Pier would be redesigned to accommodate a second coastal tanker on its northern side. It is implicit in that rearrangement that the Finger Pier would require extension.

(b) in so far as the physical extent of those extension works are concerned, the "indicative layout" schematic was provided by the IOT Operators to assist the Applicant when approached about the commitments offered by the Applicant in its letter. The schematic is expressly "not to scale" and "indicative".

(c) in so far as the nature of the works are concerned, it follows that if berths are to be rearranged as part of a terminal conveying liquids, pipework connecting those berths will also need to be adapted.

1.8 Regarding the risk assessments for construction vessels, the IOT Operators noted that the assessment focused only on the operational phase due to time constraints, indicating that the time allowed for a review was insufficient to include a review of the construction phase.

1.9 The IOT Operators raised concerns about the availability of tugs, referring to an example where a fire tug was required to service a very large area. Harbour Master Humber stated that although only one fire tug was used at any one time and that tug is used for other services while on duty, another fire tug is available if required.

1.10 On the swept path analysis for IOT Berth 8, the IOT Operators discussed the technical challenges with larger vessels (i.e. coasters). This included the insistence on the need for data clarification, noting that the data update refresh rate might 'downsample' this to transmissions as much as 5 minutes apart, whereas collections of data from the IOT Operators could provide data at 3 seconds per transmission. The IOT Operators referred to Figure 30 for a technical assessment and raised concerns about the tight tolerances with larger vessels. The IOT Operators then questioned whether the degree of impedance, looking at a range of conditions over an annual period, has been assessed. The IOT Operators also confirmed that due to time constraints, they had not undertaken further investigation.

1.11 The ExA flagged Requirement 18 as a key focus for the following day's discussion. The IOT Operators agreed and clarified the powers of ExA to impose control measures on the DCO.

1.12 The IOT Operators emphasised that operational controls alone are insufficient and expressed willingness to continue discussing controls to improve them. However, it was also noted that these alone do not solve the risk issues identified by the IOT Operators' shadow Navigational Risk Assessment [REP2-064].

1.13 The Harbour Master Humber advocated for flexible controls in the DCO, rather than anything prescriptive, citing consistency with other operational controls across DCO regimes. The IOT Operators pointed out here that changing technologies exist for all industries, and this is not a reason not to include adequate and necessary controls in the DCO. Standards may be imposed on the Applicant without affecting the Harbour Master or his functions.

1.14 On the simulations, the IOT Operators and DFDS noted issues with the invitation and details of the simulation meetings. The invite to the simulations on 15 and 17 November was received by voicemail on the afternoon of Friday 10 November and only confirmed on Monday 13 November, preventing the IOT Operators from attending. It was reiterated that no details were provided at that point and none have been received since. There was then a discussion about the vessel model used, with questions about the displacement of the vessel used in the simulations.

1.15 The IOT Operators noted that the development as proposed (including with the proposed changes) is not considered to be acceptable and that if the ExA agrees, then the only option available is to not grant the decision. The IOT Operators then stated that consultation should have been undertaken much earlier, but as it stands, there are not sufficient measures to make this development acceptable.

ISSUE SPECIFIC HEARING 6

2 AGENDA ITEM 3: DISCUSSION OF THE DRAFT DEVELOPMENT CONSENT ORDER

2.1 The IOT Operators raised a concern regarding the concept of an adaptive or emerging NRA, noting that since the NRA is a part of the Environmental Statement (specifically Appendix 10), any changes to the NRA must be considered as changes to the ES, thereby necessitating a variation. This implies that consultation would be required to make such changes lawful. Furthermore, the Environmental Impact Assessment (EIA) must be confirmed as adequate prior to granting permission. An adaptive mechanism allowing changes to the NRA would necessitate additional consultation and third-party consultation by an independent arbiter, such as the Secretary of State (SoS), as is common in most similar schemes.

2.2 The IOT Operators also pointed out that leaving matters of operational control to the discretion of the Harbour Master Humber is insufficient to assert that matters have been adequately addressed.

2.3 The IOT Operators then highlighted the duty under Regulation 5 of the Control of Major Accident Hazard Regulations 2015, which requires the IOT Operators to ensure that everything necessary has been done. This responsibility falls squarely on the IOT Operators. The emphasis here is on the proactive and comprehensive approach that the IOT Operators must take to mitigate risks and adhere to regulatory requirements, ensuring the safety and efficiency of their operations.

2.4 Regarding the IOT COMAH Report, the IOT Operators noted that one of the two main hazards identified is vessel allision with the oil infrastructure. Relevant extracts of the COMAH report will be submitted at the next deadline.

2.5 Protective provisions for the IOT Operators were then discussed. It was noted that no response had bene provided by the Applicant to date – to provisions provided in September. The Applicant committed to respond to the IOT Operators on Monday 27 November. The IOT Operators emphasised that the minimum impact protections and vessel priority need to be clearly defined in the DCO (through protective provisions).

2.6 There was a discussion regarding the extent of the COMAH site and whether this includes the IOT Trunkway and Finger Pier. The Applicant indicated the COMAH site does not include those parts of the IOT< and pointed to letter of 13 November from the HSE [REP6-043] concerning vessels in the marine environment. The IOT Operators contested that position, stating that the COMAH site includes the IOT Trunkway and Finger Pier. That position is confirmed in separate submissions by the IOT Operators at Deadline 7.

2.7 The Harbour Master Humber was then asked to confirm his role in ensuring there isn't an incident at the Trunkway. The Harbour Master confirmed that his interest is controlling all navigational risks on the Humber, one of which being impacts with structures and one being impacts with the structure of the IOT. This includes the Trunkway and risks relevant to it are always taken into account. Passover of responsibility to the HSE is typically at the gangway. The IOT Operators clarified that the COMAH Competent Authority for the IOT is HSE - not the Harbour Master Humber.

2.8 On risk assessments, the IOT Operators noted that the Harbour Master Humber seems to have suggested that a risk assessment had been undertaken for the IOT and noted that such assessment has not been shared. The Harbour Master Humber clarified that there had not been any risk assessment undertaken in relation to the IOT.