

IMMINGHAM EASTERN RO-RO TERMINAL



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1. Introduction and Interim Responses

- 1.1 The Applicant, in the time available, has at this stage only been able to provide high level comments in relation to the Additional NRA dated 5 September 2023, submitted by DFDS at Deadline 2.
- 1.2 As a consequence, this response should be viewed as an Interim Response, submitted on behalf of the Applicant and a Supplementary Response will be presented prior to the examination hearings scheduled to commence on Wednesday 27th September.
- 1.3 **General Comment** - The Applicant notes that the additional NRA submitted by DFDS concludes, in the table at Annex A, that the IERRT Scheme Navigational Hazards are both tolerable and within ALARP for all risk assessments, with the exception of four risk assessments, namely:
 - ID 02 Collision underway IERRT RoRo with another vessel;
 - ID 10 Contact (allision) IERRT RoRo with Trunkway;
 - ID 13 Contact (allision) IERRT RoRo with IOT Finger Pier; and
 - ID 20 Contact (allision) IERRT RoRo with Eastern Jetty
- 1.4 Notwithstanding the following comments on the appropriateness of the assessment methodology adopted by the consultants appointed by DFDS, it is noted that all risk assessments are considered to be tolerable and ALARP with mitigation measures applied.
- 1.5 In the view of the Applicant, this of itself provides validation for the NRA prepared as part of the DCO and submitted by the Applicant as part of the application.
- 1.6 The NRA's produced by the Applicant and DFDS are in conflict, however, in that DFDS' consultants conclude that the provision of impact protection measures for the IOT and the relocation of the IOT finger pier are required.
- 1.7 As the ExA is aware, the NRA prepared by the Applicant as part of the DCO concludes that such measures, whilst acknowledging that the provision of impact protection measures and the relocation of the finger pier would reduce/remove risk, are not - as DFDS fail to acknowledge - required to bring the proposed development within the tolerability and separately the ALARP criteria.
- 1.8 The setting of the threshold for the acceptability for risk is clearly a critical factor. The Applicant, as the successful operator of 21 ports across England, Wales and Scotland quite obviously takes issues of risk, its assessment and its avoidance very seriously - thus, for example, the

creation of ABP's HAS Board and the role undertaken by the Duty Holder, who as the in accordance with the Port Marine Safety Code, is accountable for the safe and efficient operation of its ports and harbours.

- 1.9 It follows that any navigational risk assessments applicable within the jurisdiction of the Port of Immingham Statutory Harbour Authority and indeed the Statutory Harbour Authority for the Humber, to be legitimate and applicable, must be undertaken in the context of the port operator's determined risk thresholds.
- 1.10 The DFDS submitted additional NRA fails to acknowledge this practical reality nor does it take the SHA's risk requirements into account. It has instead, merely applied its own standard of assessment for navigational risk, as commissioned by an objector to the Applicant's proposed development – without reference to the SHA.
- 1.11 The following summarises a number of high level points which ABP will be supplementing in due course -
- 1.12 **Tolerability** - In DFDS's additional NRA, any outcome that is scored at '6' or above (on a 1 to 10 scale) has been considered as intolerable. This is an arbitrary and simplistic view of the assessment of tolerability and is an incorrect application of the tolerability concept.
- 1.13 For example, there is no justification nor explanation for the selection of '6' as a threshold. The Applicant, as the Port of Immingham Statutory Harbour Authority, however, has correctly defined its tolerability thresholds based on four receptor criteria - as identified in the Port Marine Safety Code.
- 1.14 The receptor criteria have then been individually applied for each risk assessments in the NRA prepared as part of the DCO.
- 1.15 **Tolerability/ALARP** - In addition, it is noted that DFDS's additional NRA combines its outcome value of '6' as a threshold for both tolerability and ALARP. To combine the two into a single measure is not, in the Applicant's view, either a sensible nor indeed a safe way to proceed.
- 1.16 In contrast, the NRA prepared by the Applicant as part of the DCO application treats these two concepts separately. As a consequence, Risk Assessments are measured against tolerability and, by means of an entirely distinct exercise, through the application of the ALARP principle.
- 1.17 It is noted that the additional NRA produced by DFDS also relies on a mix of frequency scales, citing as justification for this, other NRA documents submitted for the 'Able Marine Energy Park' proposal (produced by Marico Marine) and the 'Solent Gateway NRA' (produced by NASH Maritime).

- 1.18 The authors of the DFDS additional NRA have incorrectly assumed that the same tolerability can be applied from two different NRAs with two different timescales for the frequency descriptors to draw their conclusions. This results in a '6' in the DFDS additional NRA correlating with a Major risk once every 1000 years, whereas a '6' in the 'Solent Gateway NRA' is for the same level of risk consequence (Major) every 25 years.
- 1.19 **Hazard Identification (HAZID)** - It is very evident that the DFDS additional NRA is not representative of Port Stakeholders, nor could it be in the circumstances. This is, of itself, a fundamental flaw in the NRA process and as such, the DFDS additional NRA cannot, in the view of the Applicant, be viewed as fit for purpose and should be given no weight as part of the examination process.
- 1.20 Indeed, in this context, it is noted that the only organisations at the DFDS HAZID workshop were representative from DFDS, NASH Maritime, Bishop Marine Consulting, and one external consultant. Beyond those consultancies (i.e., Bishop Marine Consulting and NASH Maritime) there were only four port stakeholder attendees, namely three from DFDS and the aforementioned independent consultant.
- 1.21 It is difficult to understand how, in light of the above, the additional NRA produced by DFDS can be viewed as a credible objective exercise based on consultative approach.
- 1.22 Certainly the Applicant is bound to question how an NRA, so submitted, can be viewed a representative of the views of port users, stakeholder – and indeed the Port of Immingham SHA or the Humber SHA.
- 1.23 **Risk Controls** – The DFDS additional NRA has identified only six (future) controls. This is presumably by reason of the very limited breadth of the consultation undertaken with port users, stakeholders and the two SHAs.
- 1.24 In addition, however, it should be noted that the six controls identified by the DFDS Additional NRA have all already been identified in the NRA prepared as part of the initial DCO application by the Applicant. They have already been fully considered and taken into account by the Applicant as part of the NRA process.
- 1.25 Of the six controls from the DFDS additional NRA, only two have not been considered as applied controls, namely 'RC04: Mooring equipment and infrastructure' and 'RC06: Moving Finger Pier'. Dealing with each in turn –
- 1.26 *RC04: Mooring equipment and infrastructure* – This was considered by the Applicant but was, however, ruled out as the Applicant is confident in the

engineering and design of the proposed IERRT mooring arrangements and does not consider the need to use berthing hooks. The Applicant has acknowledged the need to ensure that vessels stay safely moored alongside whilst they are berthed and will adopt usual best practice as it does with the other berths managed by the Applicant at the Port of Immingham.

- 1.27 *'RC06: Moving finger pier'* – This control has been considered and determined not be in line with the principle of ALARP.
- 1.28 There are many other controls within APP-089 which contribute to reducing risks of contact/allision with the IOT Finger pier. These are more in line with reducing these risks to ALARP rather than the removal and reconstruction of an entire pier.
- 1.29 **Methodology** - Moving on from the lack of actual stakeholder/port user consultation and the incorrect interpretation of tolerability, there are several inconsistencies between the NRA produced by DFDS and the two NRA's that they have cited as precedent for the methodology that they have employed.
- 1.30 In some instances, there is a demonstrable lack of understanding and in other cases, the authors of the additional NRA make factually incorrect statements. The following high level review seeks to address these issues, albeit at this stage, in summary:
- 1.31 The DFDS NRA cites the 'Able Marine Energy Park' NRA (produced by Marico Marine) and 'Solent Gateway NRA' (produced by NASH Maritime) as a basis for comparative methodology. A fundamental difference between these NRAs (that DFDS have failed to identify) is that they use completely different likelihood descriptors whilst scoring risks to a similar scale.
- 1.32 In other words, the Solent Gateway NRA uses likelihood descriptors which range from annually to 50 years, whilst the Able Marine Energy Park NRA uses frequency descriptors ranging from annually to over 1,000 years.
- 1.33 As a consequence, a likelihood outcome for 'Very Unlikely' for the Solent gateway is based on 50 years, whereas the same for the most unlikely frequency category of 'remote' for the Able Marine Energy Park is based on over 1,000 years.
- 1.34 Despite citing two conflicting examples, within the methodology section, the DFDS NRA goes on to use the scoring system copied from the Solent Gateway NRA, whilst attributing the frequency descriptors from the Able Marine Energy Park NRA. The consequence of so doing is that the outcome of the DFDS additional NRA has to be viewed as inaccurate and, its conclusions consequentially unacceptable.

- 1.35 It needs to be understood that “ALARP” and “tolerability” are two independent concepts that both relate in different ways to how a risk can be viewed for approval/acceptability.
- 1.36 This is a fundamental error in approach in that there is a very clear distinction/difference between the two concepts.
- 1.37 In simplistic terms, “ALARP” is ‘as low as reasonably practicable’, whereas –“Tolerability” is a threshold as to whether or not a risk overall (by its consequence multiplied by frequency) is tolerable to the appropriate authority.
- 1.38 The fundamental factor to be noted in this respect is that the Applicant believes that all risks should be reduced to an ALARP state to facilitate a safer working environment, not just those that are considered a ‘Medium’ risk as is the case with DFDS’ additional NRA and use of the term “Tolerable if ALARP”.
- 1.39 In considering tolerability, the DFDS additional NRA fails to account for the difference in consequence receptors. Put another way, the concept of tolerability has been overlaid on a five-by-five matrix based on a score as a function of consequence and frequency. This has then been applied across each receptor - people, property, environment, port business (which have different consequence descriptions for each receptor).
- 1.40 By failing to realise that one of the two axis descriptors has changed (namely, the consequence descriptors change from port business, to people, to planet/environment, to property), DFDS presents a tolerability model that considers a fatality equally as tolerable (for the same frequency) as a tier 2 pollution event. This adds to the confusion of the scoring system suggested by DFDS in the additional NRA due to their failure to recognise intolerable risks that may only score highly in one receptor area.
- 1.41 An example of this could be the considered the risk of a Pilot drowning each year. There would be no environmental impact, nor would there be an impact on port property. Although individually, the risk to people would be considered intolerable (fatality occurring annually), the averaging across multiple receptors means that the lack of pollution and cost to property associated would reduce the overall risk outcome score, artificially hiding an intolerable element of the risk on a single receptor due to an averaging across multiple receptors.
- 1.42 When considering tolerability as a function of frequency and consequence, it is imperative that the tolerability threshold is adjusted if one of the axis (i.e. consequence descriptors) change.

- 1.43 The DFDS additional NRA States that - “ABPmer has produced a qualitative NRA for the IERRT project”. DFDS, amongst various other local stakeholders and/or interested parties, have raised objections or criticisms of various aspects of the ABPmer NRA through their Relevant Representations response to the consenting application.
- 1.44 Ironically, DFDS then proceed to conduct a qualitative risk assessment within their own NRA.
- 1.45 A qualitative risk assessment is one based on consultation and subject matter expertise, where the subject matter experts apply their knowledge of the area and industry to select appropriate causes and controls in consideration of a risk and then determine which category of frequency/consequence is feasible (often from a most likely/worst credible perspective).
- 1.46 A quantitative risk assessment is data driven and requires very little input from stakeholders, assessments are made on a statistical basis. To conduct a qualitative risk assessment and claim that it is quantitative because categories/groups of years have been used in the frequency descriptions and that because the risk scores are based on a simple formula is, at best, disingenuous as the method is no different to the qualitative assessment produced for this DCO application. Simply including numbers for scoring/ranking risks does not make for a quantitative risk assessment.
- 1.47 The DFDS additional NRA states that tolerability for risks has been taken from the Solent Gateway NRA which considers risks out to 50 years (although its own NRA considers risks out to over 1,000 years).
- 1.48 The Solent Gateway NRA, however, fails to identify or provide any evidence as to who has signed off the tolerability threshold. Considering that it has been well covered that the ABP HAS Board has determined a position on tolerability, it is interesting the DFDS additional NRA decides to select a tolerability threshold that is not currently endorsed.
- 1.49 Based on DFDS’s NRA, the assessment at the Inherent Risk Assessment stage is that only 4 risks are significant, with the remaining being rated ‘Medium (Tolerable if ALARP)’ or lesser. These 4 risks are identified as risks 2, 10, 13 and, 20.
- 1.50 Risk ID 2 considers a collision between a tanker and a project vessel (Ro-Ro associated with IERRT), whereas risk IDs 10, 13, and 20 consider an allision with port infrastructure (IOT Trunkway, Finger Pier and Eastern Jetty respectively). All three of these risks at the inherent (embedded) risk assessment stage consider a worst credible scenario to include - multiple

fatalities, tier 3 oil pollution event, >£8million in property damage, and international news coverage with >£8million loses to port business, **once every 1,000 years**. Put another way, this assessment states that the embedded risk controls are so effective that they mitigate worse credible scenarios from occurring any more than once every 1,000 years for each of these risks (10, 13 and, 20).

- 1.51 In contemplation of these assessments compared with each other, the Applicant identifies that an ALARP position can be reached for risks 10 and 13 without the need for Risk Controls (RC) 05 and 06 (Impact protection for IOT Trunkway and Moving finger pier) as Risk 20 only utilises controls 1, 2, and 3, (Berthing / unberthing criteria, Standby tug provision, and Deconfliction plan respectively) and is sufficiently mitigated to a 'medium' risk.
- 1.52 The conclusion to be drawn from the above is that the Applicant, as the operator of the Port of Immingham, already has in place embedded controls that mean that the worse credible scenario will only occur every 1000 years and that the provision of only 3 additional controls (i.e., RC 1,2,3) is sufficient to reduce Risk 20 to 'Medium'. This suggests that, with further controls identified in the NRA submitted with the DCO that the identified risks could be comprehensively mitigated within SHA approved tolerability limits whilst also, separately being at an ALARP state.
- 1.53 **Interim summary:** The DFDS additional NRA contains a number of fundamental flaws, including not least, a lack of diverse stakeholder engagement – nor indeed any engagement - a mix of methodologies and mistaken reliance on two other NRAs with different assessment bases.
- 1.54 At the same time, however, in other respects, the additional NRAs entirely in line with the comprehensive NRA submitted by the Applicant.
- 1.55 Many of the components produced by the DFDS additional NRA are similar to those produced in the NRA submitted by the Applicant as part of the DCO application. This does raise the question as to the credibility of the numerous questions and objections that have been made to date by certain Interested Parties.