

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 28 to Deadline 1 submission: Response
to ExA Action Points arising from Issue Specific
Hearing 2 – Shipping and Navigation

Relevant Examination Deadline: 1

Submitted by Vattenfall Wind Power Ltd

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1 Introduction

- 1 This note has been drafted in response to requests made by the ExA during Issue Specific Hearing 2 (ISH2) on 12/12/2018, and through reference to the ISH2 Action Points document PINS Ref EV-003. As noted within the Action Points some of the actions related closely to matters intended to be raised in Examination Questions (ExQ1) which were consolidated in the draft ExQ1 document. Where there is considered to remain an overlap between ExQ1 and these Action Points appropriate reference is made to where the information is provided to avoid duplication. The general theme adopted in cases of overlap remains the greater detail is presented in the responses to ExQs.
- 2 The remainder of this document presents each Action Point as recorded within PINS Ref EV-003 and provides a response from the Applicant.

2 ExA Action 1 – Written Summaries of Oral Submissions

3 The ExA Action Point is:

4 ***Written Summaries of Oral Submissions - All participants of ISH2 are to provide a written summary of their oral submissions, cross referenced as relevant to the matters addressed in this action list.***

5 The written summaries of oral submissions are provided under separate documents, ISH2 oral summary being at Appendix 31 of this Deadline 1 submission.

3 ExA Action 2 - Initial Statement of Submissions: Port of Tilbury London Ltd (PoTLL)

6 The ExA Action Point is:

Initial Statement of Submissions: Port of Tilbury London Ltd (PoTLL) PoTLL is an 'Other Person' and has not made a relevant representation. It is requested to submit an initial statement of submissions providing information equivalent to a relevant representation, amounting to a summary statement of case and principle issues relevant to its case.

7 This action is for PoTLL and the Applicant has nothing further to add at this time.

4 ExA Action 2(A) – Submission of Nautical Chart

8 It is noted that in PINS Ref EV-003 the following Action has inadvertently been numbered as a duplicate 'Action Point 2'. For ease of reference the Applicant has renumbered it as Action Point 2A.

9 The ExA Action Point is:

The Applicant is requested to submit a wide area nautical chart showing and naming all primary channels into the Thames Estuary, sands, markers etc, the Sea Zones from the Sea Zones plan [OD008] and the Thanet Offshore Wind Farm Extension (OWFE) project Red Line Boundary (RLB) but excluding all other project data. The chart must extend to include the following limits:

- ***Outer Gabbard cardinal mark;***
- ***EURO-W mid-channel marker;***
- ***North East Goodwin cardinal mark; and •***
- ***Sea Reach No.1 South channel marker.***

10 ***The Applicant is requested to locate and highlight the following existing Pilot Boarding Stations and approximate zones of manoeuvre on the chart:***

- ***Tongue;***
- ***Sunk;***
- ***NE Goodwin; and***
- ***NE Spit.***

11 The Applicant has prepared the following schematic plot which provide the detail requested above and is included at Annex A of this submission. For reference the following information is presented on the plots:

- '16UK1255_NauticalChart' providing a scale of the outer estuary and its approaches together with ExA Sea Zones, RLB and the following requested features:

- **Buoys**

Outer Gabbard cardinal mark;

EURO-W mid-channel marker;

North East Goodwin cardinal mark; and

Sea Reach No.1 South channel marker (located at Sea Reach Pilot Boarding Station).

- Pilot Boarding Stations
 - Tongue Pilot Boarding Station;
 - Sunk Pilot Boarding Station;
 - Sea Reach Pilot Boarding Station;
 - NE Goodwin Pilot Boarding Station; and
 - NE Spit Pilot Boarding Station.
- Further Figures are also included at Annex B providing a localised schematic of the sea room and distances associated with the NE Spit and Tongue Pilot Boarding Station with distance lines added in response to , a 2nm buffer around each around the pilot boarding station and the proposed RLB plus a pecked line showing the RLB plus 450m line of maximum extent of the potential 500m rolling safety zones buffer (as relates to the safety zone area from construction activity). This schematic, and the safety zones, is also relevant for further explained at ExA Action 11 (see further below).

9 ExA Action 3 – Effects on Ports and Harbours

12 The ExA Action Point is:

13 ***For each of London Gateway Port Ltd (LGPL), PoTLL and for other port facilities within the Port of London Authority (PLA) area that concern the PLA, please provide a table with supporting explanatory text showing:***

- a) ***A port baseline position for the most recent fully reported year in terms of: o annual tonnage; o split between bulk tonnage and containers (container traffic is conventionally recorded in Twenty Foot Equivalent Units (TEU));***
- aa) ***[actually labelled (a) but updated to (aa) for ease of reference]. Forecast growth year by year commencing in 2019 within the reasonable planning time horizon¹ (intended growth), taking account of organic traffic growth, vessel mix change trends and intended facility build-out that is within the scope of any existing consents;***
- b) ***Additional growth projections within the reasonable planning time horizon (potential growth), arising from any proposed developments currently subject to development consent processes or provided for in strategic plans but not consented (for any such developments, please identify the stage to which plans have progressed as of 2019, an indicative commissioning and a completion year);***
- c) ***Intended and potential changes in the vessel traffic mix using the port within the reasonable planning time horizon;***
- d) ***maximum draft of vessels currently able to access the port;***
- e) ***Intended and potential changes in the maximum draft of vessels using the port within the reasonable planning time horizon;***
- f) ***Any capital dredge proposals to deepen existing channels to enable access by deeper draft vessels within the reasonable planning time horizon and an indicative year at which such access might become available;***
- g) ***Any capital dredge proposals to widen or make new channels to increase capacity, rationalise or reduce the access distance to the port by any vessels within the reasonable planning time horizon and an indicative year at which such access might become available;***

- h) A statement of the number of ships projected to be diverted per annum where this is alleged to be due to the construction of the Thanet OWFE - provided for a notional base year of 2020 in which the OWFE might commence construction and for subsequent years within the reasonable planning horizon and setting out a basis for the suggested need for diversion;***
 - i) An aggregate analysis of projected additional time and distance required for diverted ships to access the port per annum, [equation] where this is alleged to be due to the construction of the Thanet OWFE - provided for a notional base year of 2020 in which the OWFE might commence construction and for subsequent years within the reasonable planning horizon; and***
 - j) Projected aggregate additional shipping operating costs per annum alleged to be caused by (h) and (i), for the base year and subsequent forecast years within the reasonable planning horizon.***
- 14 The Applicant notes that this Action Point is for other Interested Parties. The Applicant would wish to note however that full consideration is given within the NRA and ES to the future baseline environment. A more detailed response as to how this is presented is provided in response to the ExQs at Appendix 25 to this Deadline 1 submission.

5 ExA Action 4 – Consideration of Thanet OWFE in Tilbury 2 NSIP Application Documents

- 15 The ExA Action Point is:

Please submit the Tilbury 2 NSIP examination document library as an entry to the examination document library for this examination.

Please identify if and if so where in the Tilbury 2 NSIP Application and Examination document set the effects of the Thanet OWFE proposal were addressed.

Where any hearing participants refer to shipping traffic forecasts or projections taking account of the potential development of Tilbury 2, these are requested to be based on data available in the Tilbury 2 NSIP application document library.

Where any hearing participants cite an individual reference within the Tilbury 2 NSIP examination document library, please identify the relevant document by name, PINS library document reference [in square brackets] but appending the prefix T2, document section and/or page number.

- 16 The Applicant notes that this Action Point is not for the Applicant and has nothing further to add at this time.

6 ExA Action 5 – Fishermans Gat

17 The ExA Action Point is:

Is there a live proposal to capital dredge Fishermans' Gat? If so, from what year would this be operational and to what depth would the channel then be maintained and what would be the maximum draft of vessels using the channel?

18 The Applicant has not considered any dredging of the Fishermans Gat and has not been made aware of any formal proposals for dredging of the Fishermans Gat via the PLA, MMO Marine Case Management System (MCMS) or the PINS project register and so does not consider this reasonably foreseeable in the context of projects that should be included within the cumulative effect assessment. The most recent review of the MMO MCMS Public Register (14th January 2019, 1030 am) identified that there are no live applications held by Port of London Authority in relation to Fisherman's Gat; the only live application being MLA/2018/00486 "Northfleet Jetty Ship Unloading System". A search of the Public Register in relation to Fisherman's Gat more specifically identified a single exemption (for seabed sampling in relation to a civil hydrography programme) dated May 2017.

19 The Applicant also notes that the most recent (limiting) critical depths (Ref: <http://www.pla.co.uk/hydrographics/data/navinfo/critlist.pdf> - as updated on 07-Jan-2019) state that the critical depths for Fishermans Gat and Princes Channel are 8.6m and 8.0m respectively. This is further explained in ExA Q 1.12.1.

7 ExA Action 6 – Use of the inshore vs offshore channels and effects of diversions

20 The ExA Action Point is:

Use of the inshore [PINS foot note] vs offshore [PINS footnote] channels and effects of diversions Please provide evidence to support the assertion that the Thanet OWFE will entail a 90 min / 25 nm increase in approach or departure for shipping.

- a) ***What assumptions are made about the size, draft and channel routing of vessels leading to this conclusion;***
- b) ***What are the fuel cost consequences of this diversion;***
- c) ***What if any relevant additional air emissions and/or air quality effects might flow from this diversion; and***
- d) ***If there is a Fisherman's Gat capital dredge proposal, could it mitigate this diversion and if so, to what extent?***

21 This action is not applicable to the Applicant however the Applicant wishes to note (as clarified in the Speaking Note) that in the most onerous route diversion scenario where a vessel might determine to not transit to the west of the extension (i.e. route 4 from Figure 46 and Table 10 of the Navigation Risk Assessment Application Ref 6.4.10.1), and instead elect to transit round the east/north then the increase in distance would be 11nm from 14nm to 25nm (not an increase of 25nm as stated by a number of Interested Parties within Question 2) which equates to 40 minutes of transit time as opposed to 90 minutes for 25nm distance (at 16.67kts). Whilst this was calculated for completeness within the assessment it is the Applicant's view that this alternative transit is not a requirement as Route 4 remains navigable, for reasons explained at the ISH and in the NRA. The assessment presented within the NRA considers potential lengths of deviation to be a maximum of ~3nm (Table 10, page 69 (pdf page 90)) which is considered a realistic worst case, not 11nm. Furthermore, this deviation occurs on the least used route (route 5 at 600 transits/annum which is less than 4% of the total 18,360 transits) whereas other routes are deviated by ~1nm.

22 Furthermore, it should be noted that instances in a vessels regular journey transit may lead to delays of this magnitude and a localised example, within the study area, of an increase in vessel route distances is demonstrated in the existing practice of vessels transiting in a broadly west/east direction, "dipping" to undertake pilot transfers in the more restricted area of sea room to the south of NE Spit rather than Tongue.

8 ExA Action 7 – Red Line Boundary (RLB) Reduction Requests:

23 This ExA Action Point is:

Where proposals to reduce the extent of proposed array area within the Thanet OWFE RLB were made at ISH2, parties making such requests are asked to provide:

A plan based on the Sea Zones Plan [OD-008] identifying the extent of the proposed reduction;

A written justification, explaining and evidencing the need for the extent of the proposed reduction.

24 The Applicant notes that this action is not applicable to the Applicant and has nothing further to add at this time.

9 ExA Action 8 – Reduction Requests: Responses and Commercial Viability Analysis

25 The ExA Action Point is:

Where proposals are submitted in response to ISH2 Action 7, please provide an in-principle response.

Is the proposal accepted or (for reasons) rejected in whole or part;

If the effect of a RLB reduction request would be to leave insufficient array area for a commercially viable project, this should be identified.

26 The Applicant awaits responses from those responding to ExA Action 7 prior to Deadline 1 and will respond accordingly prior to Deadline 2.

10 ExA Action 9 – Navigation Risk Assessment (NRA) Survey Effort

27 The ExA Action Point is:

Please clarify the source and content of the additional 3 month winter AIS data set employed in the NRA [APP-089], in addition to the standard summer and winter survey periods referred to. Please explain how this additional data has been aggregated into the summer and winter survey data.

28 3 months of AIS data (between 01 December 2016 and 28 February 2017) was provided to Marico Marine by Vattenfall and utilised in order to support and supplement early work on the pilotage study and pilotage bridge navigation simulation report. This was required because at that stage the vessel traffic survey had not been undertaken.

29 In terms of seasonal allocation this can be considered as a winter period of data. The subsequent vessel traffic survey data was collected in accordance with MGN 543 with two vessel traffic surveys (07 – 25-Feb and 15 – 29 Jun 2017) which is considered as a winter and summer period respectively and meeting the seasonal requirements of MGN 543. This data is described in Section 5.1 of the Navigation Risk Assessment (PINS Ref APP-089/ Application Ref 6.4.10.1).

30 Subsequent analysis for the navigation risk assessment is fundamentally and primarily underpinned by the vessel traffic survey data in accordance with the minimum requirements of MGN543 and supplemented by the additional 3 months of data where it was useful to utilise longer term data sets (for example to identify more instances of longer length or greater draft vessels and to interrogate the low utilisation of NE Goodwin and Tongue Pilot Transfer Stations). Where this data is referenced and utilised within the Navigation Risk Assessment this is made clear within the relevant section, plot or analysis.

11 ExA Action 10 – Marine Guidance Note (MGN)543

31 The ExA Action Point is:

Any allegations of MGN543 non-compliance on the part of the consulting team for the Applicant in the preparation of the NRA [APP-089] in terms of guidance and methodology should be documented.

32 Whilst the Applicant has not been requested to specifically comment to this, it is the Applicant's view that the data collected used is compliant in accordance with MGN543 (and indeed the NRA has also been undertaken in compliance with MGN 543) and has been agreed as acceptable by the MCA as reflected in the MCA relevant representation (RR-050), and reflected by Trinity House in their Oral Submission at ISH2. There has been no detailed dispute with the methodology adopted including the collection of data.

12 ExA Action 11 – The RLB and Safety Zones

33 The ExA Action Point is:

Please provide submissions (referencing a schematic diagram showing the relationship between a turbine foundation and the RLB) on the question of whether a safety zone may occupy waters outside the RLB. If in your submission it can, please provide a plan showing the proposed RLB with an additional pecked boundary representing the aggregate maximum extent of waters outside the RLB that can be affected by safety zones.'

34 The Applicant has prepared schematic plots, included at Annex C of this Deadline 1 submission, showing the relationship between a turbine location and the RLB and the maximum extent of safety zones that are applicable during construction and operation phases.

35 The pecked line shows a 450m offset from the RLB which illustrates the maximum extent of the roaming exclusion area at any point during the construction period. This is based on the 50m safety zone around the turbine (which is applicable post construction and during operation) which lies within the RLB boundary (in part due to the need to ensure turbine blades do not oversail the RLB) and therefore, on this basis, the 500m roaming safety zone around turbines during construction extends 450m beyond the RLB.

36 It is noted that evidence from the vessel track analysis suggests that in the NW sector (where vessels transit with closest proximity to the existing wind farm) vessels typically transit up to 400/500m from the obstruction which, together with prudent judgement of a mariner indicates that vessels will be very unlikely to approach within this distance and therefore it should not be considered that the 500m exclusion zone represents a constraint to traffic additional to the buffer the prudent mariner of a vessel would likely elect to utilise.

13 ExA Action 12 – PLA Cooperation Plan

37 The ExA Action Point is:

Further to NRA Tables 20, 21 and 22 (risk control options) [APP-089], a meeting held in January 2018 between the Applicant, MCA and Trinity House referred to a cooperation plan to be entered into with the PLA. Please confirm whether the plan was ever completed. If it was, please provide the plan. If it was not please explain why not and confirm the matters that the plan was intended to address and how these might be addressed going forwards.

38 A cooperation plan with the Port of London Authority (PLA) has been proposed to ensure that suitable coordination and notification is given to mariners of construction activities, particularly PLA pilots. A similar approach has been proposed (and agreed) for the local fishing industry through the Fishing Liaison and Coexistence Plan (PINS Ref: APP-143)

39 Vattenfall already engage with the PLA and other local marine users such as Ramsgate harbour on an informal basis in the management of the Thanet Offshore Wind Farm. This cooperation plan would seek to formalise that process, ensuring regular communication and promulgation of information is provided to the PLA. This approach and the proposed contents of the plan is set out in Control ID No. 4 Table 21 of the Navigation Risk Assessment (NRA) (PINS Ref: APP-089).

40 Given the wider concerns raised by a number of stakeholders in relevant representations, the Applicant proposes to submit a draft shipping cooperation plan which will set out the information to be provided (and which will expand on the structure set out in the NRA) that will be submitted at Deadline 2.

14 ExA Action 13 – Effects on Pilot Service Efficiency and Cost

41 The ExA Action Point is as follows:

Present a model of the cumulative effects of Thanet OWFE on the Pilot service as a whole, including the need for longer Pilot deployments, the number of vessels able to be served with the existing Pilot complement, the suggested need for more Pilots and any change to the cost of Pilotage to the customer.

42 Whilst this question is not for the Applicant, the Applicant wishes to note that as concluded in the Pilot Transfer Bridge Simulation report (PINS Ref APP-/ Application ref 6.4.10.2) all simulation runs were completed successfully, and Pilot transfer operations continue to be feasible at North East Spit Station across the full range of operational conditions even with the reduced navigable sea room caused by the extended wind farm layout.

43 In response to the ExA Questions (Appendix 25 to this Deadline 1 submission) the Applicant has also provided further information with regards the parameters used within the pilotage simulation exercise, and the assumptions which informed it. All of which was agreed and provided to the participants in advance of the simulation exercise with a report termed the 'Pilot Transfer Bridge Simulation Inception Report' (included as an Annex to Appendix 25 of this Deadline 1 submission). It is also worthy of note that the grading criteria (successful/marginal/fail) were included in the 'inception report' for review by the participants, in addition to a 'run parameter' sheet which was developed at the workshop with participants when defining and agreeing the appropriate metocean, vessel, and pilot transfer parameters to be simulated. .

15 ExA Action 14 – North East Spit Sea Room

44 The ExA Action Point is as follows:

Please provide a revised schematic identifying the minimum post construction sea room at North East Spit for a representative range of vessel lengths and drafts, taking account of the state of tide, met-ocean conditions and crossing traffic.

Explain the factors relevant to the identified minimum distance

Is it the case that the minimum distance will vary dependent on met-ocean conditions? If so, please explain that variation and what that might imply for the number of days per annum that the inshore channel at North East Spit is available for a representative range of vessel lengths and drafts.

45 The Applicant has prepared a series of analytical schematic plots to support ExA Question 1.12.1 (the full detail of which is presented at Annex M to Appendix 25 to this Deadline 1 submission) that demonstrate a breakdown of traffic. The schematics utilise the vessel traffic survey data and show the following three key vessel activities in this area of concern with subplots analysing traffic by vessel draught, vessel length and vessel type. Volumes of traffic are tabulated on a per/24hr, 1 month and annualised basis.

- Vessels proceeding to Margate Roads anchorage (from any direction)
- Vessels proceeding along the north of the wind farm (West/East and East/West) and ‘dipping’ into the traffic area (to transfer a pilot in vicinity of NE Spit)
- Vessels transiting through the inshore route (North/South and South/North)

46 These plots of how existing traffic navigates in the existing sea room and in relation to state of tide, metocean conditions and crossing traffic should be considered in context with the marked distances as shown (in response to this ExA Action) at Annex B to Appendix 28 of this Deadline 1 submission (NE Spit searoom distances) which show distances between key features during and post construction. An area representing ‘indicative area of available sea room’ post construction is shown which is bounded as follows:

- To the West by an interpolated 7.5m depth contour (note that the 10m contour as shown between the blue and white contour shading). Limiting depths are discussed further in the Applicants response to ExA Questions 1.12.1. State of tide (in terms of tidal height) is relevant in terms of the western boundary contour of depth – which will vary depending on the state of tide and the clearance over the points of critical depth at NE Spit and the plots at Annex M, Appendix 25 show how vessels navigate in relation to these points. Metocean conditions in terms of wind and wave directions are embedded within this data.
 - To the East by the wind farm boundary
 - To the North by a nominal line linking E Margate Buoy, NE Spit Buoy and the NW Corner of the project RLB
 - To the South by a nominal line extending parallel with the ExA Sea Zone from the SW corner of the project RLB
- 47 The distribution of traffic through the inshore route (for both directions of travel - North/South and South/North). is shown in the Plot titled 1.12.1 - Inshore Through Traffic - Vessel Density at Annex M of Appendix 25 and in particular in relation to the density distribution of traffic. Noting the transect between Elbow Buoy and the wind farm, 90% of the number of transits are shown and these fall outside of the 0.5nm sea room buffer of the proposed extension in line with MGN543 guidance for the operational phase – please also see response to ExA Action 16.
- 48 Should data and evidence be provided by ESL on threshold conditions of availability of NE Spit and the other pilot boarding stations, further analysis can be undertaken to interrogate this.
- 49 Further information is provided in response to the ExA questions, at Appendix 25 of this Deadline 1 submission, but in brief, and through reference to a number of illustrations that clearly show vessel tracks using a wide area of sea, it is the Applicant's position that there remains adequate sea room for the purposes of vessels transiting the inshore route, and that the inshore route is not limited by metocean conditions.

16 ExA Action 15 – North East Spit as a Pilot Location for Deeper Draft Vessels in Adverse Met-Ocean Conditions.

50 The ExA Action Point is as follows:

51 ***Is it the case that North East Spit Pilot Station is used by larger vessels in circumstances where other stations (eg SUNK) come off station due to adverse conditions?***

52 ***If so, please explain what effect your conclusions on Action 14 might have for the number of days per annum in which such vessels will be able to access a Pilot? What implications would such a change have for Ports?***

53 The Applicant notes that this has been stated by ESL and it would be helpful if further information to define these circumstances on the usage of other pilot boarding stations when Sunk is off station was made available by ESL and/or the PLA.

54 It is of note that the PLA passage planning guide (<http://www.pla.co.uk/Safety/Passage-Planning-Guide>) to the Thames Estuary shows the Tongue pilot station as a Deep Water pilot boarding station, and as such it would be expected that a Deep Draught vessel would utilise the Tongue pilot boarding station if the SUNK station had gone off station due to adverse weather. A further issue with NE Spit during adverse weather from the SE is that this coincides with higher utilisation of Margate Roads anchorage, due to vessels seeking shelter, which impinges on the available sea room for NE Spit. Therefore, pushing pilot boarding further to the north closer to Tongue.

17 ExA Action 16 – Masters’ and Pilots’ Opinion on Vessel Proximity to Operation WTGs

- 55 The ExA requested provision of a ***professional opinion on the closest safe distance between vessels and WTGs in an operation OWF. If relevant please respond identifying the different distances relevant to a range of vessel lengths, draughts and changes in metocean conditions.***
- 56 With respect to the existing wind farm, the Applicant notes there is no pre-determined distance being maintained from a feature and from the AIS vessel tracks it is clear that vessels regularly pass the existing wind farm at a distance of 400-500m in some locations (e.g. the north-west corner). This likely demonstrates the mariners desire for the most direct route whilst maintaining a reasonable safety distance.
- 57 Below is comment from Simon Moore, active Master Mariner.
- 58 In general, the acceptable closest safe passing distance for all sizes of vessel is 5 cables which is 0.5nm or 926 metres. The Masters of vessels which operate predominantly in coastal waters and frequently call into ports would, however, be prepared to pass at a closer distance.
- 59 The Applicant is also aware that the London Pilots navigate large container ships over 300 metres in length with drafts in excess of 13 metres through the Knock John Channel which is at the south end of the Black Deep. In places this channel is only 2 cables (0.2nm or 370 metres wide) and assuming the vessel favours the middle of the channel it passes just 1 cable (0.1nm or 185 metres) from navigation buoys with shoal water present close to the edges of the navigation channel. Often the passage is completed at relatively high speeds in excess of 16 knots.

18 ExA Action 17 – Pilot Transfer Bridge Simulation Report

60 The ExA Action Point is:

Please provide your assessment of the degree to which the Pilot Transfer Bridge Simulation Report ([APP-090] can be relied upon or ascribed weight by the ExA. If you conclude it is of limited reliability, please record your reasons for reaching this conclusion.

61 The Applicant has responded to this within ExQ 1.12.3 although considers the ExA should rely upon the bridge simulation as an adequate study as a component of the wider assessment undertaken in the overall NRA and which followed a methodology which had been accepted and supported by stakeholders during consultation. Further information is provided in response to ExQs at Appendix 25 of this Deadline 1 submission, inclusive of the ‘inception report’ referred to previously in this document. In brief the simulation was undertaken and drafted in consultation with agreed parties, with all parties being given adequate time and opportunity to comment on the suitability of the inception report, the parameters to be considered and employed during the simulation, and the report itself. Feedback was not forthcoming with regards requests for change, for elements to be clarified.

62 Furthermore, the Applicant notes that bridge simulation is considered as the second highest tier of evidence within the MCA/DECC 2013 methodology and hierarchy of assessment (second to site specific practical trials) and as such this type of study should be relied upon with confidence. This is considered pertinent in light not only of the consensus sought during the development of the simulation itself, but also in light of the conservative nature of the simulation in utilising tug vessels instead of Pilot cutters. This was particularly noted by Richard Jackson of ESL during ISH2 and it is of relevance given that tugs would be considered to slower in service transit speed and of less agile handling characteristics when compared to a pilot cutter. For all simulated pilotage operations to be completed successfully, when using a vessel of comparatively reduced manoeuvrability, is considered to be further evidence that pilot operations will be able to continue with limited if any hindrance.

19 ExA Action 18 – PLA and Other Port / Services / Regulatory Risk Data

63 The ExA Action Point is:

The NRA [APP-089] references Marine Accident Investigation Branch (MAIB) data in the range 1997 to 2015. To the extent that it was suggested that the PLA or any other Port or service provider holds any other relevant adverse event / risk logs or data sets that may not yet have been taken into account in the NRA, the extent and the availability of this data for analysis by the Applicant should be disclosed.

64 This action is not applicable to the Applicant but the Applicant would note that during consultation with the MCA and Trinity House it has been confirmed that the risk logs and datasets used are fit for the purpose of undertaking a NRA.

20 ExA Action 19 – NRA ‘Disconnect’ Resolution Workshop

65 The ExA Action Point is:

In circumstances where there was dispute at the hearing about the extent and timing of stakeholder engagement in the NRA [APP-089] drafting process, the Applicant undertook to reflect on the value of and participation in a workshop with NRA stakeholders at this point in Examination, seeking to resolve broad areas of disconnect around methodology and findings.

66 The Applicant sought input from a wide variety of stakeholders when forming the baseline data and approach to NRA in December 2017 and January 2018, as set out in the consultation table on page 10-3 of the Shipping and Navigation ES Chapter (PINS Ref: APP-051). Following this consultation, discussions on the content and outcomes of the NRA have been focussed with the MCA as statutory body responsible for marine safety in the waters around the Project.

67 A draft NRA was sent to the MCA and Trinity House in March 2018 for review and comment. No substantive issues on the approach or the methodology were raised at this time.

68 USB copies of the Application were sent to MCA, TH and PLA on the 29th June in advance of acceptance to allow as much time as possible for stakeholders to review the documents.

69 Following submission of the Application, the Applicant met with the MCA and Trinity House on two separate occasions (August 2018 and October 2018), seeking to discuss the outcomes of the NRA in greater detail, given the apparent disconnect between the parties (noting this was originally raised in late 2017/early 2018 and a technical workshop was sought at that time). The minutes from the August and October 2018 meeting are included at Annex D to this document. Whilst these meetings were productive, the discussions did not progress beyond high level concerns, as reflected in the relevant representations submitted by both parties.

70 Following the meeting with MCA and Trinity House in October 2018, the Applicant again requested a technical meeting on the outcomes of the NRA and was informed that neither party would engage such a meeting at that time.

- 71 Having sought a meeting on the details of the NRA with the MCA as the statutory authority for marine safety in the area of the Project with no success and having received no detailed comments or criticism of the outcomes of the NRA at relevant representations or since, the Applicant is of the view that a workshop would only be of value where specific issues are subsequently identified. The NRA has been confirmed as being MGN543 compliant and it is unclear to the Applicant why the outcomes of the assessment are not accepted.
- 72 As such it is not considered that a workshop on this matter would be beneficial at this time, until such point as there are matters of detail to discuss with the MCA. The Applicant will provide an updated response at Deadline 2 following the receipt of written representations.
- 73 It is recognised that further consultation with the relevant shipping stakeholders is essential in order to progress these matters, however it is considered that this is best structured following written representations and responses to the actions arising from ISH2.

21 ExA Action 20 – Social and economic effects on Ports, Shipping and Related Services

- 74 The Applicant notes that this Action Point has not been numbered within document EV-003 but has been ascribed ExA Action Point 20 for ease of reference. The ExA Action Point is:

Please identify and to the extent possible, quantify any alleged residual effects from the construction, operation and decommissioning of the Thanet OWFE, and identify whether you consider these to be relevant and important matters for consideration in the planning balance and acceptable or otherwise in terms of relevant NPS policy. Where effects are argued to be unacceptable, please provide reasons.

- 75 The Applicant notes that this question is not for the Applicant however wishes to note that socio-economic effects are an inherent part of the assessment and are included in the NRA and also the ES Chapter 10. Impacts of route deviation of vessel traffic were not considered to be significant.
- 76 As no changes to the pilotage service at NE Spit are proposed, no socio-economic effects are envisaged for pilotage.