

Hornsea Offshore Wind Farm

Project Two

Response to E.ON E&P's Deadline V Submission

Appendix H to the Response submitted for Deadline VI
Application Reference: EN010053

26 November 2015

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Response to E.ON E&P's Deadline V Response

1. INTRODUCTION

- 1.1 The Applicant's submission below is in response to E.ON E&P's response at Deadline V. The response is structured under the headings outlined by E.ON E&P in their response at Deadline V.
- 1.2 Throughout this response, the Applicant makes reference to previous submissions regarding the ongoing E.ON E&P discussions, including its response at:
- 1.2.1 Deadline I – Appendix CC;
 - 1.2.2 Deadline II – Appendix H; and
 - 1.2.3 Deadline V – Appendix J.
- 1.3 The Applicant would like to highlight to the Ex. A that commercial discussions are ongoing with E.ON E&P and the Applicant is hopeful of a resolution by Deadline VII.
- 1.4 The Applicant wishes to reiterate that the ES (specifically Volume 2, Chapter 7: Shipping and Navigation of the ES (Doc ref No 7.2.7), Volume 2, Chapter 8: Aviation, Military and Communications of the ES (Doc ref No 7.2.8) and Volume 2, Chapter 11: Infrastructure and Other Users of the ES (Doc ref No 7.2.11) has considered E.ON E&P's current and most likely potential future activities to the extent possible. Post submission information has provided useful information to support the commercial discussions however there is still no more additional information of sufficient detail to undertake any supplementary assessments.

2. CONFIRMATION OF ORAL EVIDENCE: INTERACTION BETWEEN THE NATIONAL POLICY STATEMENT AND THE OIL AND GAS CLAUSE AND THE DECISION TO BE MADE BY THE SECRETARY OF STATE

- 2.1 See Appendix L of the Applicant's response to Deadline VI for the Applicant's position on this matter.

3. ISSUE SPECIFIC HEARING ON 27 OCTOBER 2015 AND E.ON E&P'S RELEVANT AND WRITTEN REPRESENTATIONS

INADEQUACY OF ASSESSMENTS

- 3.1 The Applicant notes E.ON E&P's concern at paragraph 2.3 of their response at Deadline V, that the ES identified Block 48/3 to be unlicensed and that the sensitivity applied in the assessment within the ES reflected this. The Applicant clarifies that, as outlined in the Applicant's previous response (see Appendix CC of the Applicant's response at Deadline I and paragraph 4.6 of Appendix J of the Applicant's response at Deadline V) at the time of submission of the application for Development Consent (January 2015) to the Planning Inspectorate, Block 48/3 was not licenced. E.ON E&P have subsequently been awarded Block 48/3 in the 2nd tranche of the 28th licence round which was announced in July 2015. The Applicant advises that the ES identifies the fact the sensitivity of the Block would change on award of licence (see Volume 2, Chapter 11: Infrastructure and Other Users of the ES (Doc ref No 7.2.11); paragraphs 11.6.97 and 11.6.110).
- 3.2 The Applicant notes that, as outlined in the Applicant's previous response (see paragraph 4.3 of Appendix J of the Applicant's response at Deadline V) E.ON E&P's known future activities in Block 48/3, which were supplied to the Applicant during pre-application consultation and prior to the submission of the application for Development Consent, have been assessed in Volume 2, Chapter 11 of the ES (see paragraphs 11.6.91, 11.6.103, 11.6.202 and 11.6.213). The assessment included consideration of the potential for E.ON E&P to be awarded Block 48/3 and for the potential activities within the block to include exploration wells to be drilled at the western edge of Subzone 2 and seismic data acquisition to be required across the block. Volume 2, Chapter 11 of the ES considered information held in the public domain regarding existing hydrocarbon fields in the Project Agreement for Lease (AfL) area (OilandGasData 2014) and information provided by E.ON E&P to the Applicant during pre-submission consultation (see Annex 12 of the Consultation Report (Doc ref No 2.1)).
- 3.3 The Applicant acknowledges that they were aware of the potential for E.ON E&P to be awarded the licence Block 48/3 prior to the submission of the application for Development Consent. The Applicant was made aware of the potential offer of Block 48/3 during the meeting on 2nd April

2014, as noted in Table 11.4 of Volume 2, Chapter 11 of the ES. The Applicant advises that Table 11.4 identifies where issues raised during consultation are addressed within the ES.

- 3.4 The Applicant makes particular reference to the pre-submission consultation letter from E.ON E&P (July 2014) which advises that, pursuant to a successful award in the 28th licencing round, the prospective activities in Block 48/3 include the Newton prospect, with the potential for 3 to 4 wells to be drilled with site specific surveys required around each well. As noted above, Table 11.4 in Volume 2, Chapter 11 of the ES identifies where these issues have been addressed within the ES.
- 3.5 The Applicant notes that a further consultation meeting was held between the Applicant and E.ON E&P on 2nd September 2014, in which further discussions were had about potential development within Block 48/3. At this meeting all parties noted and agreed that all information shared in this meeting is confidential until such time that 28th Round awards are offered by DECC. The Applicant advises that the assessment included as much information as was practically possible to do so, bearing in mind the confidential nature of Block 48/3 information and that an agreement was had that further consultation was to be had if and when Block 48/3 was awarded to E.ON E&P.
- 3.6 The Applicant notes E.ON E&P's comments with regard to the screening of Block 48/3 into the Cumulative Impact Assessment (CIA) at paragraph 2.7 of E.ON E&P's response at Deadline V. The Applicant notes that it has assessed, on a topic by topic basis, the cumulative effects resulting from incremental changes caused by other reasonably foreseeable actions alongside the Project. A fundamental requirement of undertaking CIA is to identify those developments or activities with which the Project may interact to produce a cumulative impact. A specialised process was developed in order to methodically and transparently screen the large number of projects/plans that may be considered cumulatively alongside the Project. This involved a stepwise process that considers the level of detail available for project/plans, as well as the potential for interactions on a conceptual, physical and temporal basis. Further details on the approach to the CIA are provided below (paragraph 4.16) and in Volume 1, Chapter 5: Environmental Impact Assessment of the ES (Doc ref No 7.1.5) and Volume 5, Annex 4.5.1: Cumulative Effects Screening Matrix of the ES (Doc ref No 7.4.5.1).

DEFERENCE TO THE OIL AND GAS CLAUSE WITHIN THE AGREEMENT FOR LEASE

- 3.7 See Appendix L of the Applicant's response to Deadline VI for the Applicant's position on this matter.

4. REVIEW OF APPLICATION ENVIRONMENTAL STATEMENT

CONSULTATION

- 4.1 The Applicant notes E.ON E&P's concerns with regard to consultation with E.ON E&P and with regards to consultation with the oil and gas industry as a whole in regard to impacts on navigation and aviation at paragraph 3.3 of E.ON E&P's response at Deadline V. The Applicant notes that there has been extensive consultation with E.ON E&P, which has informed the assessment of infrastructure and other users presented in the ES (see Table 11.3 and 11.4 of Volume 2, Chapter 11 of the ES and the Consultation Report, Section 8.15). The ES has assessed the impact of the Project on potential activity in Block 48/3, as outlined in previous submissions by the Applicant (see paragraph 4.4 of Appendix J of the Applicant's response at Deadline V), in the event of a successful licence application, according to the proposed activities outlined in E.ON E&P's Phase 2 Consultation response (July 2014). The pre-application consultation between the Applicant and E.ON E&P on 2nd September 2014 notes that further consultation will be had between the parties in the event that E.ON E&P are successful in their 28th licence round bid and until that time the information is to remain confidential. As the award of Block 48/3 was held back for an Appropriate Assessment, Block 48/3 was not awarded until July 2015 (after the application for the Development Consent). The information contained and assessed within the ES is therefore factually correct as of January 2015.
- 4.2 The Applicant advises that consultation with regard to navigation is explained at paragraph 4.24 below. The Applicant advises that consultation with regard to aviation is explained at paragraph 4.38 below.

POOR UNDERSTANDING OF OIL AND GAS ACTIVITIES AND TIMESCALES

- 4.3 The Applicant notes E.ON E&P's concern at paragraph 3.4 of E.ON E&P's response at Deadline V, that the ES provides no assessment of Block 48/3. The Applicant wishes to clarify

however that the ES does adequately assess the known potential future activities within Block 48/3, as detailed in paragraph 3.2 above.

- 4.4 The Applicant notes E.ON E&P's reference to a caveat statement within the ES suggesting that any future owner of the licence would be undertaking its activities at its own risk (at paragraph 3.4 of E.ON E&P's response at Deadline V), the Applicant is not aware of this statement being made anywhere within the ES.
- 4.5 The Applicant notes E.ON E&P's concerns with regard to the assessment on seismic survey and further activity in Block 48/3, at paragraph 3.5 of E.ON E&P's response at Deadline V. The effect of the Project on seismic data acquisition in Block 48/3 has been assessed in Volume 2, Chapter 11 of the ES (see paragraph 11.6.91) as stated in previous submissions by the Applicant (see paragraph 4.4 of Appendix J of the Applicant's response at Deadline V). The Applicant notes that Volume 2, Chapter 11 of the ES is guided by information provided by E.ON E&P during pre-application consultation (see Table 11.3 and Table 11.4 of Volume 2, Chapter 11 of the ES).
- 4.6 The Applicant notes E.ON E&P's concern at paragraph 3.6 of E.ON E&P's response at Deadline V, that the ES does not include all activities associated with exploration and development. Again the Applicant notes that Volume 2, Chapter 11 of the ES is guided by information provided by E.ON E&P during pre-application consultation (see Table 11.3 and Table 11.4 of Volume 2, Chapter 11 of the ES). The effect of the Project on seismic data acquisition in Block 48/3 has been assessed in Volume 2, Chapter 11 of the ES (see paragraph 11.6.91), as well as the potential impact of the Project on potential drilling activity in Block 48/3 (see paragraph 11.6.103 of Volume 2, Chapter 11 of the ES).
- 4.7 The Applicant notes that it has already responded with regard to helicopter access to proposed platforms within Block 48/3, and refers the Ex. A to table heading: Access and logistics – aviation: Helicopter approaches to potential future development in Block 48/3, page 1 of Appendix CC of the Applicant's response to Deadline I.
- 4.8 The Applicant notes E.ON E&P's concern at paragraph 3.6 of E.ON E&P's response at Deadline V, that directional drilling is mentioned as a potential method within Volume 2, Chapter 11 of the ES. The Applicant can confirm that the option of directional drilling is presented as a general consideration at paragraph 11.6.106 of Volume 2, Chapter 11 of the ES and not in relation to the specific geology of Block 48/3. The Applicant advises that this is an option open for consideration by oil and gas operators, which has been discussed during pre-application consultation meetings with oil and gas operators including E.ON E&P.
- 4.9 The Applicant notes E.ON E&P's concern at paragraph 3.7 of E.ON E&P's response at Deadline V, that other activities such as increased traffic and platform installations have not been considered in the ES. The Applicant has responded with regard to increase in traffic movement, and refers the Ex. A to table heading Access and logistics – shipping: Increase in traffic movement concurrent with activity in Block 48/3, page 4 of Appendix CC of the Applicant's response to Deadline I. The Applicant also notes that the Maritime and Coastguard Agency (MCA) agree, as outlined in the SoCG between the Applicant and the MCA (see sections 3.5, 3.8 and 3.9 of Appendix PP of the Applicant's response to Deadline I), with the Shipping and Navigation assessment undertaken in the ES.
- 4.10 The Applicant has also previously responded within Appendix CC of the First Response with regard to E.ON E&P's present known operational activity including; flights to the Babbage platform and displacement of oil and gas service vessels (see table heading: Access and logistics – aviation: Helicopter and vessel access to the Babbage platform, page 2 of Appendix CC of the Applicant's response to Deadline I).
- 4.11 The Applicant notes E.ON E&P's concern at paragraph 3.7 of E.ON E&P's response at Deadline V, with regard to the fact that any future operator should be aware of the Hornsea Zone. The Applicant can confirm that this approach is correct and that this is a requirement of the offshore licencing round application process. In addition, the Applicant notes that E.ON E&P were consulted throughout pre-application consultation (Table 11.3 and 11.4 of Volume 2, Chapter 11 of the ES and the Consultation Report, Section 8.15).
- 4.12 The Applicant has taken into account within the ES, the most likely potential activities of E.ON E&P to the extent that information was publically available. The ES does not seek to make any conclusions on the allocation of risk (which is not the purpose of an EIA contrary to the suggestions by E.ON E&P at paragraph 3.7 of E.ON E&P's response at Deadline V).

- 4.13 The Applicant notes E.ON E&P's concerns with regard to the assessment of seismic surveys at paragraph 3.8 of E.ON E&P's submission to Deadline V and highlights that seismic activity has been assessed within the ES (see paragraph 4.6 above) and that the activity could proceed prior to the development of the Subzone 2 infrastructure, which is in accordance with the proposed timeframes presented by E.ON during pre-application consultation (in July 2014). The Applicant also notes that all reference to alternative seismic techniques was provided to the Applicant by E.ON E&P during pre-application consultation (July 2014).
- 4.14 The Applicant notes that E.ON E&P have identified an inconsistency in timescales presented for the offshore licencing rounds at paragraph 3.11 of E.ON E&P's submission to Deadline V. The Applicant advises the information presented in the ES (paragraph 11.5.59) is factually correct and fails to find any inconsistencies applied anywhere within the ES.
- 4.15 The Applicant confers with E.ON E&P's comment at paragraph 3.12 of E.ON E&P's response to Deadline V, that the ES references a DECC report (2011) that states a consensus view exists whereby the great majority of large fields in the southern North Sea, at shelf depth waters of <200 m, have already been discovered. The Applicant advises that it can only be guided by information in the public domain or information provided by other parties during consultation. The information provided by E.ON E&P to the Applicant was in regard to the Newton Prospect, which is outside and overlapping with the western edge of Subzone 2 which was used in the assessments. No figure could be included in the ES as this information was considered confidential pending the outcome of the 28th licence round (see paragraph 3.5 above).

CUMULATIVE IMPACT ASSESSMENT

- 4.16 As noted in paragraph 3.6 above, the Applicant notes the ES has assessed, on a topic by topic basis, the cumulative effects resulting from incremental changes caused by other reasonably foreseeable actions alongside the Project.
- 4.17 In order to provide a comprehensive CIA of all relevant projects, the Southern North Sea Offshore Wind Forum (SNSOWF) produced an extensive list of plans, projects and activities occurring within a large study area encompassing the greater North Sea and beyond (hereafter referred to as the CIA long list). The CIA long list comprehensively collated detail of some 1,650+ operational or proposed projects/plans in the greater North Sea and includes those within both the UK and adjoining international jurisdictions. By starting from this very broad list of available data, projects/plans were screened in or out as relevant to the Project assessment as a whole, or as relevant to particular topics (such as marine mammals) based on distance or data confidence. This approach is consistent with Guiding Principle 4 of the RenewableUK Cumulative Impact Assessment Guidelines (RenewableUK, 2013). All projects/plans listed in the CIA long list were then individually screened with specific reference to each topic and assessment within the ES. Those that are 'screened in' are then carried forward into the relevant topic chapters of the ES. Further details on the approach taken for the screening of other projects into the CIA are included in Volume 1, Chapter 5 and Volume 5, Annex 4.5.1 of the ES.
- 4.18 Block 48/3 was not considered in the CIAs of the ES for a variety of reasons (depending upon the topic and impact assessment) including, due to a lack of data confidence (i.e., a low data confidence was identified due to lack of publically available information noting that the information supplied by E.ON E&P during pre-application consultation was stated to be confidential and was in any event, not sufficient for EIA purposes) and no conceptual overlap (i.e., the potential for the cumulative impact to directly or indirectly affect the receptor(s) in question).

IMPACT ASSESSMENT RELATING TO OIL AND GAS

- 4.19 The Applicant acknowledges that they are aware of the UK offshore licencing regime. The Applicant confers that consultation began with E.ON E&P in 2011, three years prior to the announcement of the 28th licence round offers. The Applicant notes E.ON E&P's concerns at paragraph 3.17 of E.ON E&P's response at Deadline V, that consultation has been insufficient with regard to future activities within Block 48/3. The Applicant notes that the ES has assessed the known potential activities in Block 48/3 as detailed in paragraph 3.2 above.
- 4.20 The Applicant is confused as to what impact the Project has on E.ON E&P activities in Block 48/3 prior to the construction of the Project which E.ON E&P wish to see assessed as stated in paragraph 3.18 of E.ON E&P's response at Deadline V. The impact of construction activities from the Project on Block 48/3 are discussed in paragraph 4.6 above.

PROPOSED CO-EXISTENCE

- 4.21 The Applicant notes E.ON E&P's concerns at paragraph 3.19 of E.ON E&P's response at Deadline V, that consultation on co-existence did not start adequately until the award of Block 48/3, which was post the application for Development Consent. The Applicant highlights that the consultation undertaken with oil and gas operators of Blocks in proximity to Subzone 2 aimed to address any future operational issues and establish a line of communication to ensure that coexistence between both activities can be achieved and any disruption minimised.
- 4.22 The Applicant also wishes to advise the Ex. A that the requirement for ongoing consultation is identified as a designed in mitigation measure as included in Table 11.43 of Volume 2, Chapter 11 of the ES:
- 4.22.1 On-going consultation with DECC and oil and gas operators will promote and maximise cooperation between parties and minimise both spatial and temporal interactions to facilitate coexistence; and
- 4.22.2 Promulgation of information through Notice to Mariners, pursuant to Schedules H, I, J and K, Part 2, Condition 5 of the draft DCO (Version 7).
- 4.23 The Applicant took account of E.ON E&P's proposed development to the extent possible based on information publically available, not stated to be confidential and that Block 48/3 was not announced or accepted until after the application for Development Consent. The Applicant notes that consultation has continued with E.ON E&P throughout the Examination phase and continues to date (at meetings on 3rd September 2015, 1st October 2015, 6th October 2015, 14th October 2015, 23rd October 2015, 2nd November 2015, 10th November 2015 and 11th November 2015).

NAVIGATION

Blind Spots

- 4.24 The Applicant notes that E.ON E&P raised concerns at paragraph 3.21 of E.ON E&P's response at Deadline V, over the Chamber of Shipping's consultation feedback and the potential for blind spots to be created around the northwest and southwest corners of the Project. The Applicant notes that this consultation response was received from the Chamber of Shipping in July 2014 and between that date and the consultation meeting with the Chamber of Shipping in September 2014, the issues were addressed and resolved (Phase 2 Consultation response and subsequent meeting – see Table 15.2 of Volume 5, Annex 5.7.1: Subzone 2 and Offshore Cable Route NRA of the ES (Doc ref No 7.5.7.1) for further details). This resulted in no relevant representation being submitted by the Chamber of Shipping during the Examination phase of the Project.
- 4.25 The Applicant advise that the SoCGs between the Applicant and both the MCA and Trinity House Lighthouse Service (THLS) state that the Applicant has adequately addressed the navigational safety impacts on commercial vessels from the development of the Project and that the mitigation measures to be implemented are sufficient to bring risk to tolerable levels or as low as reasonably practicable (see paragraph 3.9.1 of Appendix PP and paragraph 3.9.1 of Appendix TT of the Applicant's response at Deadline I respectively). These mitigation measures include:
- 4.25.1 Use of guard vessels where appropriate, pursuant to Schedules H, I, J and K, Part 2, Condition 8(2) of the draft DCO (Version 7);
- 4.25.2 Use of advisory safety zone around Subzone 2 and construction vessel traffic will be monitored by AIS for the duration of the construction period, pursuant to Schedules H and J, Part 2, Condition 8(2), Condition 14(5) and Condition 15(2)(e) and Schedules I and K, Part 2, Condition 8(2), Condition 14(5) and 15(2)(e) of the draft DCO (Version 7);
- 4.25.3 Direction from THLS on temporary aids to navigation, pursuant to Schedules H, I, J and K, Condition 4 and Condition 8(2)(j) of the draft DCO (Version 7);
- 4.25.4 Use of appropriate marine coordination, pursuant to Schedules H, I, J and K, Part 2, Condition 5 of the draft DCO (Version 7);
- 4.25.5 Promulgation of information to regular operators, pursuant to Schedules H, I, J and K, Part 2, Condition 5 of the draft DCO (Version 7);

- 4.25.6 Emergency response capabilities including the implementation of an HSE Management System, associated documentation and policies, an ERCoP relative to the area and distance that Subzone 2 is being developed offshore and provision of self-help vessels, pursuant to Schedules H, I, J and K, Part 2, Condition 3 of the draft DCO (Version 7);
 - 4.25.7 ERCoP and HSE Management System to address NUC vessels, pursuant to Schedules H, I, J and K, Part 2, Condition 3 of the draft DCO (Version 7);
 - 4.25.8 Continued liaison with stakeholders regarding turbine layout, pursuant to Schedules H, I, J and K, Part 2, Condition 5 and Condition 8(1)(a) of the draft DCO (Version 7);
 - 4.25.9 Consultation with MCA and THLS on final layout and aids to navigation, pursuant to Schedules H, I, J and K, Part 2, Condition 4, Condition 8(1) and Condition 8(2)(j) of the draft DCO (Version 7);
 - 4.25.10 Use of fenders/bollards installed for low speed/energy allisions, pursuant to Schedules H, I, J and K, Part 2, Condition 8(2)(c) of the draft DCO (Version 7); and
 - 4.25.11 Charting of infrastructure pursuant to Schedules H, I, J and K, Part 2, Condition 5 of the draft DCO (Version 7).
- 4.26 The Applicant also notes that the MCA SoCG states that the methodology used within the NRA meets the requirements set out in Marine Guidance Note (MGN) 371 for the application to install and operate an offshore renewable energy installation (see paragraph 3.8.1 of Appendix PP of the Applicant's response at Deadline I).

Choke Points

- 4.27 The Applicant notes E.ON E&P's concerns with regard to choke points at paragraph 3.23 of E.ON E&P's response at Deadline V. The Applicant advises that all navigational issues were resolved with the key maritime stakeholders, as stated in paragraph 4.25 above. All navigational issues, including the ability of vessels to undertake manoeuvres as per the international collision regulations (COLREGS), were resolved with the key maritime stakeholders, as noted in the SoCG between the Applicant and both the MCA and THLS (see paragraph 3.9.1 of Appendix PP and paragraph 3.9.1 of Appendix TT of the Applicant's response at Deadline I respectively).
- 4.28 The Applicant would like to highlight that the Braemer report submitted by E.ON E&P at Appendix 7 of their response to Deadline V, does not take into consideration the low number of vessels operating on the identified routes (see Table 16.1- Main Route Descriptions of Volume 5, Annex 5.7.1 of the ES), the potential time of any closest point of approach, nor does it adequately demonstrate vessel domains in a reasonable scale. The Applicant wishes to advise that the figures presented in the Braemer report mislead the reader into the amount of available sea room due to the size of the icons used within the figures. Considering Figure 4.7 of the Braemer report as an example, it is noted that the distance between the Babbage platform and the northwest corner of Subzone 2 is 5.1 NM (or 9.4 km) and a typical vessel on route 4 is the Begonia Seaways which measures 230 metres length overall. There are approximately 2 vessels per day using route 4.

Closest Point of Approach

- 4.29 The Applicant notes E.ON E&P's concerns at paragraph 3.26 of E.ON E&P's response to Deadline V, with regard to the closest point of approach to the Babbage Platform. The Applicant advises that paragraph 18.7.1 of Volume 5, Annex 5.7.1 of the ES states the method used for assessing route deviations. Paragraph 18.7.3 of Volume 5, Annex 5.7.1 of the ES then explains both the internal and external studies undertaken by Anatec to show that a worst case of 1 NM passing distance should be used when considering allision risk; given that vessels do pass consistently and safely within 1 NM of established wind farms (and oil and gas platforms on the United Kingdom Continental Shelf (UKCS)). The Applicant also advises that, as stated in paragraph 18.7 of Volume 5, Annex 5.7.1 of the ES, the main routes are indicative only and used to assess the worst case parameters of a development, and in reality vessels will select varying routes dependent on the conditions and nature of traffic at the time. The Applicant advises that the methodology used for the Subzone 2 and Cable Route NRA is in line with MGN 371, as noted in the SoCG between the Applicant and MCA (paragraph 3.8.1 of Appendix PP of the Applicant's response at Deadline I).

- 4.30 The Applicant advises that Volume 5, Annex 5.7.1 of the ES makes reference to the mitigation measures identified by E.ON E&P in their response at Deadline V, but advises that there are a number of additional mitigation measures considered in the Subzone 2 and Cable Route NRA and noted within Tables 7.14 and 7.22 of the Volume 2, Chapter 7 of the ES (see paragraph 4.25.1 to 4.25.11 above for further details). Further, the Applicant notes that within the SoCG between the Applicant and MCA, and the SoCG between the Applicant and THLS (paragraph 3.9.1 of Appendix PP and paragraph 3.9.1 of Appendix TT of the Applicant's response at Deadline I respectively), that the designed in mitigation measures and the additional mitigations recognised as part of Volume 5, Annex 5.7.1 of the ES are sufficient to reduce the risk associated with the development of the Project to tolerable or as low as reasonably practicable levels.

Construction Vessel Routing

- 4.31 The Applicant notes E.ON E&P's concerns at paragraph 3.28 of E.ON E&P's response at Deadline V, with regard to construction vessel routing. With regards to vessels restricted in their ability to manoeuvre the response provided by Braemer at Appendix 7 of E.ON E&P's response at Deadline V does not give consideration to the fact that the COLLRISK models are one of many tools used to assess the potential risk of the development. The Formal Safety Assessment methodology and the various elements used to consider risk are detailed in Section 4.2 of Volume 5, Annex 5.7.1 of the ES, which are in line with the requirements set out within MGN 371 (as noted in the SoCG between the Applicant and MCA (paragraph 3.8.1, Appendix PP of the Applicant's response at Deadline V).

Hazard Workshop Attendance

- 4.32 The Applicant notes E.ON E&P concern at paragraph 3.29 of E.ON E&P's response at Deadline V, that oil and gas operators were not invited to the hazard workshop. The Applicant notes that, as stated in paragraph 4.31 above, the Hazard Workshop is one of a number of methods used to assess risk associated the development of the Project. The Applicant advises that the Hazard Workshop main focus is to identify local knowledge which may not be identified as part of a base case assessment. It is usual for both the MCA and THLS to be invited, but also to decline (as in this case) to allow the local users full input. It should be noted that both the MCA and THLS were issued the hazard log for comment prior to its use by the Applicant and publication in the NRA and ES, as well as included in Volume 5, Annex 5.7.1 and Volume 2, Chapter 7 of the ES and therefore, consulted on at Phase 2 Consultation. The Applicant notes that E.ON E&P did not raise any issues with the hazard workshop attendance in their Phase 2 consultation response.
- 4.33 The Applicant advises that the full list of invitees to the Hazard Workshop are noted in Table 22.1 of the Volume 5, Annex 5.7.1 of the ES and included regular operators who were recorded operating in the area (i.e., Boston Putford Offshore Safety Ltd (now a subsidiary of SEACOR Marine) who provide Emergency Response and Rescue Vessels (ERRV) to the Babbage platform)) and local port operators/services such as Associated British Ports and Humber Pilots.

Cumulative Impact Assessment

- 4.34 The Applicant notes E.ON E&P's concern at paragraph 3.30 of E.ON E&P's response at Deadline V, with regard to the CIA. The Applicant advises that, as noted in the SoCGs between the Applicant, MCA and THLS (Section 3.11 of Appendix PP and Section 3.11 of Appendix TT of the Applicant's response at Deadline I), the Applicant has adequately assessed the impacts on users of marine traffic from the Project, together with other projects and activities within the southern North Sea area.
- 4.35 The Applicant notes that the Braemer report submitted at Appendix 7 of E.ON E&P's response at Deadline V suggests that the Dogger Bank Zone was not considered within the CIA. The Applicant advises that Section 23 of Volume 5, Annex 5.7.1 of the ES includes all projects scoped into the assessment. Both Dogger Bank projects (Creyke Beck A+B and Teesside A+B) were included (see Table 23.1 and Figure 23.1 of Volume 5, Annex 5.7.1 of the ES and Table 7.20 of Volume 2, Chapter 7 of the ES). The Applicant advises that, as noted in the SoCG between the Applicant, MCA and THLS (Appendix PP and Appendix TT of the Applicant's response at Deadline I), that it is agreed that the work undertaken as part of the Southern North Sea Offshore Wind Forum (SNSOWF) has provided a realistic and regional scale development scenario for consideration within the CIA.

Data Adequacy

- 4.36 The Applicant notes E.ON E&P's concerns at paragraph 3.31 of E.ON E&P's response at Deadline V, with regard to data adequacy. The Applicant advise that the MCA, as agreed in the SoCG between the Applicant and the MCA (Appendix PP of the Applicant's response at Deadline I), confirms that the shipping and navigation baseline environment has been adequately described in the ES and that the marine traffic survey data used is appropriate for the assessment and details a good representation of commercial traffic in the area. The Applicant also advises that they have also undertaken a traffic validation survey to ensure that the data used with Volume 5, Annex 5.7.1 and Volume 2, Chapter 7 of the ES is reflective of current conditions. The Applicant has responded in this regard at paragraphs 7.23 to 7.24 of Appendix G of the Applicant's response to Deadline V.
- 4.37 The Applicant also advises that the main routes and 90th percentiles which are considered within the baseline assessment are based on the results of extensive Automatic Identification Data, but the COLLRISK modelling is undertaken using Anatec's ShipRoutes database, which includes all vessel movements within the area (including to/from Norwegian ports), not just those notable under the principles of MGN 371 (see Section 19 – Collision and Allision Risk Modelling Assessment, Volume 5, Annex 5.7.1 of the ES). The COLLRISK model also includes extensive accident and incident data, to calibrate the model, a summary of which is given in Appendix A of the Volume 5, Annex 5.7.1 of the ES and meets the requirements specified in Guidance on the Assessment of Offshore Wind Farms – Methodology for Assessing Navigational Safety Risks of Offshore Wind Farms (Department for Energy and Climate Change in Association with MCA, 2005 and as updated 2013).

AVIATION

- 4.38 The Applicant advises that the aviation assessment (Volume 2, Chapter 8 of the ES) and the designed in mitigation measures proposed for the Project have been duly consulted on with the appropriate aviation stakeholders, including oil and gas operators, in accordance with the requirements of NPS-EN-1 (Table 8.1 of Volume 2, Chapter 8 of the ES). The designed in mitigation measures include:
- 4.38.1 Engagement and consultation with the offshore helicopter operators and oil and gas platform owners throughout the development of the Project to ensure minimal disruption to operations, pursuant to Schedules H, I, J and K, Part 2, Condition 5 and Condition 8(2) of the draft DCO (Version 7); and
- 4.38.2 An ERCoP will be in place for all phases. The ERCoP will include the provision of self-help and will detail specific marking and lighting of the wind turbine generators. The SAR helicopter bases will be supplied with an accurate chart of the Subzone 2 wind turbine positions. Specific procedures for the safe operation of SAR helicopter units are detailed in Marine Guidance Note 371 (MCA, 2008a). Lighting of turbines shall be in accordance with CAP 393 (The Air Navigation Order) Article 220 and MOD requirements. These measures are included in the draft DCO, pursuant to Requirement 3, and Schedules H, I, J and K, Part 2, Condition 3 (Version 7).
- 4.39 The Applicant notes that NATS (En-Route) Plc (NERL) has no objection to the Project (Table 8.4 of Volume 2, Chapter 8 of the ES and the Consultation Report, Annex 12). In addition, a SoCG has been agreed between the Applicant and CAA (Appendix AAA of the Applicant's response at Deadline I), in which there are no matters of ongoing discussion or matters that are disagreed.
- 4.40 The Applicant has previously responded to E.ON E&P's concerns with regard to helicopter access to the Babbage platform, and the Applicant refers the Ex. A to table heading Access and logistics – aviation: Helicopter and vessel access to the Babbage platform, page 2 of Appendix CC of the Applicant's response to Deadline I.
- 4.41 The Applicant has also previously responded to E.ON E&P's concerns with regard to helicopter access to proposed platforms within Block 48/3 (see table heading: Access and logistics – aviation: Helicopter approaches to potential future development in Block 48/3, page 1 of Appendix CC of the Applicant's response to Deadline I).
- 4.42 The Applicant notes that E.ON E&P state at paragraph 3.34 of E.ON E&P's response at Deadline V, that they do not accept the significance of effect to offshore platforms however in their response they do not make it clear which platform they have concerns with helicopter access to. The Applicant has responded in a previous submission with regard to helicopter access to the Babbage Platform (see paragraph 4.41 above). E.ON E&P have previously

advised in their Written Representation (submitted at Deadline I) that the most likely development scenario for Block 48/3 is a minimum facilities platform not requiring helicopter access. The Applicant advises (as stated in table heading: Access and logistics – aviation: Helicopter approaches to potential future development in Block 48/3, page 1 of Appendix CC of the Applicant's response to Deadline I) that no further assessment can be made with regard to helicopter access to a platform unless a proposed platform location is known.

Helicopter Main Routes

- 4.43 The Applicant notes that E.ON E&P do not accept the significance of effect predicted by the assessment of Helicopter Main Routes (HMRs) at paragraph 3.35 of E.ON E&P's response at Deadline V. The Applicant notes (as previously stated in table heading: Access and logistics – aviation: Additional helicopter flights to Subzone 2, page 3 of Appendix CC of the Applicant's response to Deadline I) that the ES has assessed the impact of the Project on the HMRs in the vicinity of the Project during both construction (paragraph 8.6.26 of Volume 2 and Chapter 8 of the ES) and operation (paragraph 8.6.35 of Volume 2 and Chapter 8 of the ES) which has been consulted on, and agreed, with all appropriate aviation stakeholders. The Applicant advises that an aviation workshop was held in January 2013 to which aviation stakeholders including National Air Traffic Services (NATS), helicopter operators and oil and gas operators attended. The aim of this workshop was to agree the assessment principles for impacts on aviation stakeholders, which were subsequently used in the aviation assessment presented in Volume 2, Chapter 8 of the ES. This ensured that the aviation assessment was based on accurate assumptions informed through consultation. The outcome of this workshop guided the HMR assessment undertaken in Volume 2, Chapter 8 of the ES. The Applicant notes that there has been no objection raised to the HMR assessment process or outcome by any of the statutory aviation consultees.
- 4.44 The Applicant wishes to clarify that the HMR assessment does not involve a redesign of large tracts of HMRs, as stated by E.ON E&P at paragraph 3.36 of E.ON E&P's response at Deadline V, but states in paragraph 8.6.30 of Volume 2, Chapter 8 of the ES, that the helicopter operator will continue to fly the HMRs in Visual Flight Rules (VFR). When being used in instrument meteorological conditions (IMC) and the isotherm level is at an altitude that precludes flight below 2,000 ft., the helicopter operator requires an obstacle free route. Such a route is available as a deviation around Subzone 2. The Applicant wishes to note that consultation has taken place with both CAA and NATS (see Table 8.3 and 8.4 of Volume 2, Chapter 8 of the ES) and no objection has been raised by either stakeholder to the Project.
- 4.45 The Applicant wishes to clarify to E.ON E&P that the assessment is not incorrect and that it at no point states that HMRs could not be flown across Subzone 2 in IMC. The Applicant advises that the ES clearly states helicopters will continue to fly the HMR's in IMC unless the isotherm level is at an altitude that precludes flight below 2,000 ft (see paragraphs 8.6.27, 8.6.28, 8.6.30, 8.6.36 and 8.6.38 of Volume 2, Chapter 8 of the ES).
- 4.46 The Applicant also advises that the assessment provides alternative route deviations around Subzone 2, which satisfy the CAA guidance of a 2 NM obstacle free clearance.
- 4.47 The Applicant responded to the concerns raised by E.ON E&P with regard to transit times of helicopters to the Babbage Platform within Block 48/3 in its response at Deadline I (see Appendix CC, table heading Access and logistics – aviation: Helicopter and vessel access to the Babbage platform, of the First Response).
- 4.48 Information provided during pre-application consultation (in October 2012) between the Applicant and E.ON E&P, advised that E.ON E&P flies to the Babbage platform from Great Yarmouth. These flights would not be deviated by the presence of turbines within Subzone 2 (Figure 8.8 of Volume 2, Chapter 8: of the ES).
- 4.49 The Applicant is confused by E.ON E&P's concern at paragraph 3.39 of E.ON E&P's response at Deadline V, that the frequency of flights across the Project during helicopter hoist operations only considers the flights from the Project. Volume 2, Chapter 8, paragraph 8.6.48 of the ES clearly states that the frequency of this impact occurring is based on the level of cross-zone transit and the probability of hoist operations in the vicinity of the cross-zone traffic. The Applicant wishes to clarify that the assessment advises, in paragraph 8.6.48 of Volume 2, Chapter 8 of the ES, that there will be approximately 16 helicopter flights as a result of helicopter hoist operations required for the Project across the Subzone 2 area of 462 km² on any one day of the year.

Consultation Zones: Effects on Offshore Platform Operations

- 4.50 The Applicant wishes to clarify that the aviation assessment does not apply a unilateral decision only to apply an 8 NM consultation requirement, as stated by E.ON E&P at paragraph 3.40 of their Response at Deadline V. The requirement for a 9 NM consultation zone, as per CAA Guidance (CAP 764), is made explicitly clear in paragraph 8.5.20 of Volume 2, Chapter 8 of the ES. Table 8.5 of Volume 2, Chapter 8 of the ES identifies all platforms within this 9 NM consultation zone. Volume 2, Chapter 8 of the ES then goes on to state that, when considering the maximum height of a turbine within Subzone 2, a potential effect on a helicopter approach would only occur at a distance of 8 NM. Therefore any platform at a distance of between 8 to 9 NM is within the 9 NM consultation zone (and was consulted with) but is not affected by the Project. The E.ON E&P operated Babbage Platform is at a distance of 7.8 NM from the platform and would therefore be impacted in certain weather conditions, a full assessment was therefore carried out and included at paragraph 8.6.79 of Volume 2, Chapter 8 of the ES.
- 4.51 The Applicant wishes to clarify that there is no mention of a 7 NM buffer around platforms within the ES, as advised by E.ON E&P at paragraph 3.40 of their response at Deadline V. The Applicant wishes to advise that a 7 NM distance is referred to as being the distance used in the assessment for a helicopter to start its radar approach to a platform (see paragraph 8.6.56 of Volume 2, Chapter 8 of the ES).

Airspace Regulations and Design

- 4.52 The Applicant agrees that airspace regulations and design must be fully considered within the ES as stated by E.ON E&P at paragraph 3.41 of their response at Deadline V. The Applicant wishes to clarify that the aviation assessment has been conducted by aviation experts, the assessment, methodology, results and designed in mitigation measures (see paragraphs 4.38.1 and 4.38.2 above) have been consulted on with the appropriate stakeholders including CAA and NATS, the helicopter operators and the offshore oil and gas industry (see Table 8.3 and 8.4 of Volume 2, Chapter 8 of the ES), that no objections to the Project have been raised by NATS (see Table 8.4 of Volume 2, Chapter 8 of the ES), and that a SoCG has been agreed between the Applicant and CAA (Appendix AAA of the Applicant's response at Deadline I), in which there are there are no matters of ongoing discussion or matters that are disagreed.

Visual Flight Rules

- 4.53 The Applicant notes that E.ON E&P is concerned at paragraph 3.43 of their response at Deadline V, that the assessment of the Project, together with likely positions for any platforms within the licensed areas, suggests that helicopter operations in support of any exploration or extraction platform should not be relied upon except, perhaps, in the most benign VFR conditions. The Applicant advises that E.ON E&P have provided no likely platform locations within Block 48/3. Indeed, as referred to in paragraph 4.42 above, the Applicant notes that E.ON E&P have advised in their Written Representation (submitted at Deadline I) that the most likely development scenario for Block 48/3 would be a minimum facilities platform not requiring helicopter access. In addition, the Applicant notes that it has already responded to the concerns raised by E.ON E&P with regard to helicopter access to proposed platforms within Block 48/3 in its response at Deadline I (see Appendix CC, table heading: Access and logistics – aviation: Helicopter approaches to potential future development in Block 48/3 of the Applicant's response at Deadline I). The Applicant would like to reiterate that until a platform location is provided by E.ON E&P, no further assessment can be undertaken at this current time.
- 4.54 The ES states clearly (paragraph 8.5.19 of Volume 2, Chapter 8 of the ES) that any obstacle within a 9 NM consultation zone is a trigger for consultation and not a prohibition on development (or IMC access as E.ON E&P states). Any development within the 9 NM consultation zone may impact on the ability to undertake airborne radar approaches in IMC but will not preclude all flights in IMC (paragraph 8.6.53, 8.6.49, 8.6.63, 8.6.73, 8.6.87 of Volume 2, Chapter 8 of the ES).