



SCOPING OPINION:

Proposed Rampion 2 Offshore Wind Farm

Case Reference: EN010117

Adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

August 2020

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1. INTRODUCTION

1.1 Background

- 1.1.1 On 02 July 2020, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Rampion Extension Development Limited ('RED') (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Rampion 2 Offshore Wind Farm (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled *'Rampion 2 Offshore Wind Farm Environmental Impact Assessment Scoping Report'* (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
 - (b) *the specific characteristics of the development;*
 - (c) *the likely significant effects of the development on the environment; and*
 - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from

requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) *a plan sufficient to identify the land;*
 - (b) *a description of the proposed development, including its location and technical capacity;*
 - (c) *an explanation of the likely significant effects of the development on the environment; and*
 - (d) *such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on '*the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)*'.
- 1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations. The Applicant's ES should therefore be co-ordinated with any assessment made under the Habitats Regulations.

1.2 The Planning Inspectorate's Consultation

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA

Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.

- 1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.
- 1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

1.3 The European Union (Withdrawal Agreement) Act 2020

- 1.3.1 The UK left the European Union as a member state on 31 January 2020. The European Union (Withdrawal Agreement) Act 2020 gives effect to transition arrangements that last until the 31 December 2020. This provides for EU law to be retained as UK law and also brings into effect obligations which may come in to force during the transition period.
- 1.3.2 This Scoping Opinion has been prepared on the basis of retained law and references within it to European terms have also been retained for consistency with other relevant documents including relevant legislation, guidance and advice notes.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/ resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in sections 1.1 and 2.3 of the Scoping Report.

2.2.2 The Proposed Development relates to a new offshore wind farm with an installed capacity of up to 1.2 gigawatts (GW). The Proposed Development is located adjacent to the existing Rampion Offshore Wind Farm ('Rampion 1') in the English Channel, 14km off the coast of Brighton & Hove and approximately 30km east of the Isle of Wight. A location plan is provided in Figure 1.1 of the Scoping Report.

2.2.3 The Proposed Development comprises both onshore and offshore infrastructure components as follows :

- Offshore wind turbine generators (WTGs) and associated foundations and inter-array cabling
- Up to three offshore substations;
- Up to four offshore export cables (within a defined cable corridor)
- A 'landfall' site using Horizontal Directional drilling (HDD) installation techniques to bring offshore cables onshore through up to four transition bays near Climping and Littlehampton;
- Onshore cabling in a single corridor approximately 36km in length; and
- A new onshore substation that will connect to the existing substation at Bolney, Mid Sussex.

2.2.4 The Scoping Report explains that the number of WTGs to be installed for the Proposed Development would not exceed the number of WTGs installed for the Rampion 1 Offshore Wind Farm. Table 2.2 of the Scoping Report sets out that this will be up to 116 WTGs and also sets out other parameters of the offshore components (eg maximum height to blade tip, foundation types, export cable specifications etc, to the extent that they are known at this stage).

2.2.5 The offshore elements of the Proposed Development are situated within an "Area of Search" adjacent to the south east and west of the existing Rampion 1 project. A small area to adjoin / 'bridge' the two areas to enable cabling

requirements across the full offshore area of the Proposed Development. These areas are shown on Figure 2.8 of the Scoping Report.

- 2.2.6 Table 2.3 sets out parameters for the onshore cabling components, for the connection to the National Grid transmission system. As well as the transmission cables, the Proposed Development requires the construction of a new substation and the Applicant is currently considering a number of candidate 'satellite' sites (within a radius of 5km of the existing Bolney substation). The anticipated area required for the substation is up to 4.5 hectares (ha). The connection to the existing Bolney substation would require underground cables and minor upgrades.
- 2.2.7 The construction of the Proposed Development is anticipated to take up to five years, as set out in Figure 2.7 of the Scoping Report. During operation, some routine and corrective maintenance activities will be required as set out in paragraphs 2.3.50 – 2.3.56 of the Scoping Report. The operational lifetime of the Proposed Development is assumed to be a minimum of 30 years, followed by a period of decommissioning (likely to be undertaken broadly in reverse to the sequence of construction works and involving similar levels of equipment and activity).

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

- 2.3.1 The ES should include the following:
- A description of the Proposed Development comprising at least the information on the site, design, size and other relevant features of the development; and
 - A description of the location of the development and description of the physical characteristics of the whole development, including any requisite demolition works and the land-use requirements during construction and operation phases.
- 2.3.2 Paragraphs 2.3.50 – 2.3.56 of the Scoping Report provides some detail on operation and maintenance activities. The ES should provide a full description of the nature and scope of these activities, including the types of activity, their frequency, and how works will be carried out for both the onshore and offshore elements of the Proposed Development. This should include consideration for the potential overlapping of activities with those required for the continuing operation of Rampion 1.
- 2.3.3 Paragraph 2.3.56 and subsequent aspect sections of the Scoping Report address decommissioning in respect of the Proposed Development. The ES should include the rationale in support of the assessment of potential significant effects during the decommissioning phase, including a description of anticipated decommissioning activities (eg where the magnitude of impact is similar to that during construction). Where there is uncertainty of impacts during decommissioning this should be clearly explained along with the implications for the assessment of significant effects (including assumptions

and mitigation on which reliance is placed). For example, there is reference to a “decommissioning plan” but production of such a document does not appear in the Applicant’s scoping commitments register (Scoping Report appendix 2).

Offshore

- 2.3.4 Inter-array cabling and offshore export cables are described as having a “Target depth” for burial of 1m (dependant on cable burial risk assessment). The cable burial risk assessment is recorded as commitment C-45 in appendix A of the Scoping Report, although it is not immediately clear whether this would take place prior to or post any DCO consent. The ES should be clear on the range of burial depths that have been considered as part of the assessment(s). Where reliance is placed on a subsequent risk assessment as mitigation, the ES should also explain the effectiveness and degree of confidence that can be placed on this measure.
- 2.3.5 The Scoping Report does not explain whether High Voltage Alternating Current (HVAC) or Direct Current (HVDC) technologies are proposed, and the ES should describe the technology proposed or options sought in this regard. The Scoping Report also explains that array cables will be 33kV or 66kV but not the circumstances in which either 33kV or 66kV options would be chosen, or whether it might be a combination of both. The ES should describe these options, any differences in the physical infrastructure requirements and provide an assessment of environmental effects that may result between one or the other (or combined) option.
- 2.3.6 The Inspectorate understands that preliminary engineering investigations indicate “several” design options for the wind turbine foundations could be considered including monopiles and jackets, and that “other solutions such as suction buckets may be used”. The ES should include a full and detailed description of all the foundation options for which development consent is being sought, including maximum diameter of piles should they be used. The Inspectorate makes further comments on flexibility in design in the following paragraphs.
- 2.3.7 The Scoping Report identifies the potential need for seabed preparation for foundations and inter array cabling, which may include boulder and/or sandwave clearance. Any requisite seabed preparation for the export cable route should also be described and any resultant likely significant effects assessed within the ES. Should seabed preparation involve dredging, the ES should identify the quantities of dredged material and identify the likely location for disposal. The Applicant’s attention is drawn to the scoping consultation response of the Marine Management Organisation (MMO) relating information required as part of the ES in supporting characterisation of new or existing disposal sites if they are to be included as part of the Proposed Development.
- 2.3.8 The ES should identify the worst-case footprint of seabed disturbance that would arise from all offshore construction activities, for example seabed clearance/preparation, and vessel jack up and anchoring. The maximum footprints of all permanent components should also be identified.

- 2.3.9 The Scoping Report states that the construction of the landfall is “anticipated” to be via a trenchless technique “such as” HDD. The Inspectorate notes that commitment C-4 of Scoping Report Appendix A states that a HDD technique “will” be used at the landfall location. No other trenchless or trenched techniques are presented. The ES should describe and assess the options considered in this regard and the assessment of alternatives should explain the reasons for the selected option(s).

Onshore

- 2.3.10 Paragraph 2.3.38 of the Scoping Report explains that, in addition to buried cabling, onshore cable installation methods such as HDD will be also be used as required to avoid or minimise potential effects where constraints are identified, including environmentally sensitive water course crossings, major roadways and railways. The ES should identify the locations and type of all such crossings. Where reliance is placed in the ES on the use of a specific method as mitigation, the Applicant should ensure that such commitments are appropriately defined and secured. The Inspectorate notes that commitment C – 18 of the Scoping Report Appendix A refers to a “Crossing Schedule” being produced, and this should be cross-referenced throughout the aspect chapters where special crossing types are relevant.
- 2.3.11 Paragraph 2.3.45 of the Scoping Report explains that onshore cable construction may be phased and there is a possibility that the installation of all onshore cables may not occur in a single operation. It is also explained that haul roads, and any construction compounds will be removed, and reinstatement will take place on completion of the installation. The construction programme should be defined in the ES on the basis of a worst case in respect of phasing periods. The ES should identify where new access routes, either temporary or permanent, are required to access the onshore cable corridor and compounds, as well as the duration for which they will be required in light of phasing (eg how long they will need to be retained for in light of cable installation in multiple operations).
- 2.3.12 The Scoping Report identifies the need for joint bays and link boxes “at regular intervals along the route” to enable the cable installation and connection process. Regular intervals are defined as 600 – 1000m in C-19, Appendix A of the Scoping Report, although it does define whether their locations will be determined by the time the application is made. The Inspectorate anticipates this may not be the case. If uncertainty persists, the ES should identify a worst-case scenario for the number of jointing pits and link boxes that may be required, and their impact during both construction and operation. Where commitments are made at specific locations to mitigate any potential effects, these should be secured through the Code of Construction Practice (CoCP) (or equivalent) as referred to at paragraph 4.4.27 of the Scoping Report.
- 2.3.13 For the avoidance of doubt, the Inspectorate understands that the connection of the new substation to the existing National Grid Bolney substation would be via underground cabling (as is implied but not expressly stated at paragraphs 2.3.34 - 2.3.48 of the Scoping Report). The Inspectorate expects the ES to provide greater clarity as to the necessary connection works between the new

substation and the Bolney substation (up to 5km away). This is particularly important if / where construction and operation of the connection may be of a different form or type (eg overhead line) to the connection of the new substation to the landfall. In addition, paragraph 2.3.35 states that the existing National Grid Bolney substation would require "underground cables and minor upgrades", and it is unclear whether these works would be part of the Proposed Development (as associated development) or subject to separate consent by National Grid or another party. These matters should be clearly set out in the ES and likely significant effects should be assessed.

Alternatives

- 2.3.14 The EIA Regulations require that the ES include 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'.
- 2.3.15 The Inspectorate acknowledges section 2.4 of the Applicant's Scoping Report setting out the consideration of alternatives to date, and ongoing and future activities that are proposed in this regard to inform the ES.
- 2.3.16 Paragraph 3.5.21 confirms that the consideration of alternatives will be presented in the ES in line with the requirements of the EIA Regulations 2017. The Inspectorate would expect this to comprise a discrete section in the ES that provides details of the reasonable alternatives studied across all aspects of the Proposed Development and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.

Flexibility

- 2.3.17 The Inspectorate notes the Applicant's desire to incorporate flexibility into their draft DCO (dDCO) and its intention to apply a 'Rochdale Envelope' approach for this purpose. Where the details of the Proposed Development cannot be defined precisely, the Applicant will apply a worst case scenario, as set out in section 2.2 of the Scoping Report.. The Inspectorate welcomes the reference to Planning Inspectorate Advice Note nine 'Using the 'Rochdale Envelope' in this regard.
- 2.3.18 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations. In this regard, the Inspectorate expects that the component parameters presented in tables 2.2

and 2.3 of the Scoping Report will be refined and further detailed as part of the ES.

- 2.3.19 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

3. ES APPROACH

3.1 Introduction

- 3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'¹ and associated appendices.
- 3.1.2 Aspects/ matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.1.3 The Inspectorate has set out in this Opinion where it has/ has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects / matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.1.4 The Inspectorate has made effort to ensure that this Scoping Opinion is informed through effective consultation with the relevant consultation bodies. Unfortunately, at this time the Inspectorate is unable to receive hard copy consultation responses, and this may affect a consultation body's ability to engage with the scoping process. The Inspectorate also appreciates that strict compliance with COVID-19 advice may affect a consultation body's ability to provide their consultation response. The Inspectorate considers that Applicants should make effort to ensure that they engage effectively with consultation bodies and where necessary further develop the scope of the ES to address their concerns and advice. The ES should include information to demonstrate how such further engagement has been undertaken and how it has influenced the scope of the assessments reported in the ES.
- 3.1.5 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through DCO requirements (or other suitably robust methods) and whether relevant consultation bodies agree on the adequacy of the measures proposed.

¹ Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3.2 Relevant National Policy Statements (NPSs)

- 3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.
- 3.2.2 The designated NPS(s) identified by the Applicant as being relevant to the Proposed Development in section 3.4 of the Scoping Report are as follows:
- Overarching NPS For Energy (NPS EN-1);
 - NPS on Renewable Energy Infrastructure (NPS EN-3);
 - NPS for Electricity Networks Infrastructure (NPS EN-5); and
 - NPS for Ports.

3.3 Scope of Assessment

- 3.3.1 The Applicant's overarching approach to the assessment is set out in detail in section 4.4 of the Scoping Report, and graphically summarised in Figure 4.1

General

- 3.3.2 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:
- to demonstrate how the assessment has taken account of this Opinion;
 - to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
 - to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
 - to describe any remedial measures that are identified as being necessary following monitoring; and
 - to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

Baseline Scenario

- 3.3.3 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

- 3.3.4 The concept of 'future baseline' conditions is introduced in the context of a number of aspect chapters (eg landscape, air quality and ecology). In light of the number of ongoing developments within the vicinity of the Proposed Development application site, and potential evolution of the onshore and offshore environments prior to construction and operation of the Proposed Development, the Applicant should clearly define their overarching approach to the prediction of future baseline conditions against the project programme.
- 3.3.5 Some aspect chapters of the Scoping Report have identified specific receptors, whereas others identify broad categories of receptors only. Specific receptors should be clearly identified within the ES, alongside categorisation of their sensitivity and value. Section 4.4 of the Scoping Report explains the generic approach to defining receptor sensitivity in order to assess the potential impacts upon each receptor. The Inspectorate expects a transparent and reasoned approach to be applied to assigning receptor sensitivity to be defined and applied across the aspect chapters.

Forecasting Methods or Evidence

- 3.3.6 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.3.7 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.3.8 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.
- 3.3.9 The approach to assessing and interpreting significance levels should be consistent across aspect chapters where possible. Where matrices are used in combining magnitude of impact and sensitivity of receptor they too should be consistent in the determining overall significance. The ES should clearly explain where and how professional judgement has been applied in assessing the significance of effects.
- 3.3.10 Paragraphs 4.4.10 – 4.4.11 set out that there is a considerable existing evidence base in the form of data from the previous assessment carried out for Rampion 1. This existing evidence base has and will continue to be used "to help inform the scope of the forthcoming environmental assessments and establish the robustness of survey data collected during the COVID-19 period". The Inspectorate generally welcomes the Applicant's intention that the evidence base will be regularly discussed with relevant stakeholders to ensure it remains appropriate. Particular consideration should be given to the methods and the spatial and temporal scope of previous surveys given the time that has elapsed since the Rampion 1 application, particularly in justifying

the continued validity and relevance of information to the Proposed Development. The Inspectorate also notes the relative geographical separation between the onshore cable routes for Rampion 1 and the Proposed Development which may also affect the applicability.

- 3.3.11 The Inspectorate understands that the maximum height to blade tip of the Proposed Development's WTGs is 325m, whereas those installed as part of Rampion 1 are 140m to blade tip. This is likely to be a key consideration across the aspect chapters of the ES (particularly landscape and visual, cultural heritage and socio-economics), and the ES should be clear as how the magnitudes of effects of the Proposed Development (within the design envelope) account for the relationship with the Rampion 1 project
- 3.3.12 Paragraphs 4.3.10 – 4.3.12 of the Scoping Report explains that an Evidence Plan Process with specialist stakeholders is being progressed in effort to agree the approach and information required to support the assessment of certain environmental aspects relating to HRA matters and "relevant components of the EIA process". This approach to agreeing the finer details of the assessment is welcomed. The Applicant should ensure that any agreements reached during this process are evidenced within the ES.
- 3.3.13 As set out in paragraph 2.3.11 of this Scoping Opinion, the ES should be clear as to the potential construction programme options where the installation of all onshore cables may not occur in a single operation. Paragraph 4.4.26 and Figure 2.7 of the Scoping Report states that the construction of the Proposed Development will have a duration of approximately 5 years although it does not clearly state how this accounts for flexibility in the onshore construction programme and whether this accounts one or more cable installation operations.

Residues and Emissions

- 3.3.14 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.

Mitigation and Monitoring

- 3.3.15 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements.
- 3.3.16 The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.

- 3.3.17 The ES should clearly demonstrate how the Applicant has had regard to the mitigation hierarchy, for example by giving consideration to the avoidance of key receptors. In this regard, Paragraphs 4.4.19 – 4.4.20 set out the Applicant’s proposed approach to setting out avoidance, best practice and design commitments and classifying them against the IEMA ‘Guide to Shaping Quality Development’ (2015) definitions.
- 3.3.18 The Inspectorate also notes that Appendix A of the Scoping Report provides a list of certain “commitments” that have already been identified by the project team for the purpose of mitigating potential effects of the Proposed Development. Many of those measures are in the form of management or mitigation plans or other documents. Whilst this approach is generally welcomed and the principles of how the measures listed would likely be beneficial in terms of environmental effects understood, limited detail is provided as to the content of the management and mitigation plans that are listed, and many of the matters included are suffixed by statements such as “where possible” or “as far as practicable”. It is therefore difficult for the Inspectorate to gain confidence as to the likely efficacy of such plans at this stage. The ES should therefore set out these plans (or the reliance placed on them) in sufficient detail so as to understand the significance of residual effects. This should also include identification of any monitoring and remedial actions (if relevant) in the event that predicted residual effects differ to actual monitored outcomes Further comments on these are made in sections 4 and 5 of this Scoping Opinion as appropriate.
- 3.3.19 The ES should also identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions within the framework of the commitments register and other mitigation measures.

Risks of Major Accidents and/or Disasters

- 3.3.20 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development’s susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development’s potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.
- 3.3.21 Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met.

Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

- 3.3.22 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.

Transboundary Effects

- 3.3.23 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES. The Scoping Report states that the Proposed Development is likely to have significant effects on another European Economic Area (EEA) State.
- 3.3.24 Regulation 32 of the EIA Regulations inter alia requires the Inspectorate to publicise a DCO application on behalf of the SoS if it is of the view that the proposal is likely to have significant effects on the environment of another EEA state, and where relevant, to consult with the EEA state affected. The Inspectorate considers that where Regulation 32 applies, this is likely to have implications for the examination of a DCO application.
- 3.3.25 Appendix B of the Scoping Report explains the Applicant's consideration of transboundary impacts, and concludes that the following aspects could give rise to significant effects on other EEA states and therefore screened in to the Applicant's ES:
- Fish and shellfish ecology;
 - Marine mammals;
 - Ornithology;
 - Commercial fisheries;
 - Shipping and navigation; and
 - Other marine users.
- 3.3.26 On the basis of current information, the Applicant is of the view that the Proposed Development could affect the environment in Belgium, France, the Netherlands and Spain.

- 3.3.27 The Inspectorate expects that the ES will therefore provide further detail as to the Proposed Development's potential for significant transboundary effects and to confirm which EEA States could be affected.

A Reference List

- 3.3.28 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Coronavirus (COVID-19) Environmental Information and Data Collection

- 3.4.1 The Inspectorate understands government enforced measures in response to COVID-19 may have consequences for an Applicant's ability to obtain relevant environmental information for the purposes of their ES. The Inspectorate understands that conducting specific surveys and obtaining representative data may be difficult in the current circumstance.
- 3.4.2 The Inspectorate has a duty to ensure that the environmental assessments necessary to inform a robust DCO application are supported by relevant and up to date information. Working closely with consultation bodies, the Inspectorate will seek to adopt a flexible approach, balancing the requirement for suitable rigour and scientific certainty in assessments with pragmatism in order to support the preparation and determination of applications in a timely fashion.
- 3.4.3 Applicants should make effort to agree their approach to the collection and presentation of information with relevant consultation bodies. In turn the Inspectorate expects that consultation bodies will work with Applicants to find suitable approaches and points of reference to allow preparation of applications at this time. The Inspectorate is required to take into account the advice it receives from the consultation bodies and will continue to do so in this regard.

3.5 Confidential and Sensitive Information

- 3.5.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to personal information specifying the names and qualifications of those undertaking the assessments and / or the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information.
- 3.5.2 Where documents are intended to remain confidential the Applicant should provide these as separate electronic documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.

3.5.3 The Inspectorate adheres to the data protection protocols set down by the Information Commissioners Office² . Please refer to the Inspectorate's National Infrastructure privacy notice³ for further information on how personal data is managed during the Planning Act 2008 process.

² <https://ico.org.uk>

³ <https://infrastructure.planninginspectorate.gov.uk/help/privacy-notice/>

4. ASPECT BASED SCOPING TABLES - OFFSHORE

4.1 Coastal Processes

(Scoping Report section 5.2)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	n/a	n/a	No matters are proposed to be scoped out of the assessment

ID	Ref	Other points	Inspectorate's comments
4.1.2	Paragraph 5.2.12	Baseline – changes to wave and hydrodynamic regime	The Scoping Report states that the potential impact of the design of the Proposed Development will be assessed " <i>both alone and in conjunction with the built design of the existing Rampion project</i> ". It is unclear why the Proposed Development would be assessed alone given that Rampion 1 is now entirely completed. The ES should assess the impacts of the Proposed Development in the context of the relevant baseline environment.
4.1.3	Paragraph 5.2.12	Baseline – changes to wave and hydrodynamic regime	The Scoping Report states that the assessment for Rampion 1 was overly conservative and overestimated the number of structures built, yet it asserts that the results of the previous modelling remain valid and can reliably support the ES for the Proposed Development. The ES should ensure that potential changes to the wave and hydrodynamic regime are assessed against an accurately described baseline so as not to underestimate the scale and significance of effects.
4.1.4	Table 5.2.3	Changes to tidal, wave and sediment transport regime and seabed scour resulting from	The Scoping Report does not address impacts on tidal, wave and sediment transport regime or seabed scour during construction and decommissioning of the Proposed Development. The ES should include

ID	Ref	Other points	Inspectorate's comments
		construction and decommissioning of the Proposed Development.	an assessment of the impacts associated with changes to tidal, wave and sediment transport regime and seabed scour where significant effects are likely to occur. The Applicant should make effort to agree the approach with relevant consultation bodies including NE and the MMO.
4.1.5	Paragraph 5.2.33	Sensitive receptors to coastal processes.	<p>SSSIs along the coastline (as shown in Figure 5.11.3) have not been listed as sensitive receptors in this regard.</p> <p>The ES should present a full list of designated sites that have the potential to be impacted in terms of coastal processes, including any effects on Climping Beach SSSI (in relation to changes to landfall morphology) and Beachy Head East MCZ and the Bembridge MCZ.</p>
4.1.6	Paragraph 5.2.37	Cumulative effects – sediment transport regime	The Scoping Report does not address the likelihood of the potential impacts to the sediment transport regime to act cumulatively with other developments and/or infrastructure (including the Aquind interconnector). The ES should include an assessment of the cumulative impacts on the sediment transport regime where significant effects are likely to occur.

4.2 Other Marine Users

(Scoping Report section 5.3)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	Table 5.3.5; 5.3.49 – 5.3.50	Impacts on oil and gas infrastructure	The Scoping Report demonstrates no spatial overlap between the study area and existing oil and gas infrastructure. The Inspectorate is content for these receptors to be scoped out of the assessment.
4.2.2	Table 5.3.5; 5.3.51	Impacts on military activity and munitions	<p>The Scoping Report demonstrates no spatial overlap between the study area and munitions disposal areas or MoD practice or exercise areas (PEXAs). The Inspectorate is content for these receptors to be scoped out of the assessment (with the exception of MoD Danger Area D037, see the following paragraph).</p> <p>The Inspectorate notes the comments of the MoD around the potential overlap between the Proposed Development would and Danger Area boundary for D037 which could impact on Military training and the Navy's freedom to exercise within the Area. This matter should be considered as part of the ES where significant effects are likely to occur.</p>
4.2.3	Table 5.3.5; 5.3.51	Impacts on other offshore energy infrastructure (not including offshore wind)	The Scoping Report demonstrates no spatial overlap between the study area and other offshore energy infrastructure. The Inspectorate is content for these receptors to be scoped out of the assessment.
4.2.4	Table 5.3.5; 5.3.40 – 5.3.42	Impacts on recreational fishing and seaweed farming	The Scoping Report seeks to scope out recreational fishing and seaweed farming from the assessments of temporary increases in suspended sediments and deposition, and alteration in wave energy direction. The Scoping Report provides no information regarding the local seaweed farming industry, and no justification for scoping out effects on recreational fishing. The Inspectorate does not agree to

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			scope this aspect out of the ES based on current information.
4.2.5	Table 5.3.5	Effects from the temporary increase in suspended sediments and deposition on recreational boating and sailing	No justification is given to scope out this matter, however the Inspectorate considers that given their nature significant effects are unlikely to occur to these receptors and they can be scoped out of the assessment. The ES should set out any measures intended to control impacts of this sort through provisions in the relevant embedded measures through DCO requirements and other relevant commitments.
4.2.6	Table 5.3.5	Increased subsea noise impacts on: Aggregate extraction, disposal sites, offshore wind, subsea cables and pipelines, recreational boating and sailing	No justification is given to scope out these impacts however the Inspectorate agrees that significant effects are unlikely to occur due to the nature of the receptors and agrees they can be scoped out of the assessment.
4.2.7	Table 5.3.5	Effects from alteration in wave energy direction and period on: Aggregate extraction, disposal sites, offshore wind, subsea cables and pipelines, recreational boating and sailing, (i.e. all receptors except diving and watersports)	No justification is given to scope out these impacts. The Inspectorate considers that insufficient justification has been provided to scope out the effects on recreational boating and sailing. However, for receptors others than recreational boating and sailing, the Inspectorate agrees that significant effects are unlikely to occur due to the nature and sensitivity of the receptors and they can be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.2.8	n/a	Aquaculture	The Scoping Report makes no mention of the aquaculture industry as a potential receptor. This is not addressed in Chapter 5.6 for Commercial Fisheries either. The ES should assess the impacts from the Proposed Development to the aquaculture sector where significant

ID	Ref	Other points	Inspectorate's comments
			effects are likely to occur.

4.3 Fish and Shellfish Ecology

(Scoping Report section 5.4)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	Paragraph 5.4.41	Electromagnetic field (EMF) impacts arising from cables (Operation)	<p>Although the Inspectorate notes the basis of the evidence provided to support the Applicant's proposed approach (Orpwood et al. (2015) and Armstrong et al. (2015)), the MMO and its technical advisors do not support these findings. In their view, significant uncertainties concerning electromagnetic effects remain.</p> <p>The Inspectorate therefore does not agree that likely significant effects upon fish receptors from operational EMF can be excluded at this stage and this matter should remain scoped into the ES.</p>
4.3.2	Paragraph 5.4.42	Accidental pollution impacts during the construction phase resulting in potential effects on fish and shellfish receptors (Construction and Decommissioning)	<p>The Inspectorate agrees that, with the implementation of measures to limit any potential pollution incidents, any potential impacts on fish and shellfish are unlikely to result in significant effects and therefore further assessment is not required. However, the Inspectorate seeks assurances as to the detail of such measures that would be employed and how they would be secured and therefore considers that this detail should be presented within the ES.</p>
4.3.3	Paragraph 5.4.43	Direct and indirect seabed disturbances leading to the release of sediment contaminants (Construction and Decommissioning)	<p>The Inspectorate agrees on the basis of the evidence provided and the nature of the Proposed Development that direct and indirect impacts to the seabed resulting in the release of sediment contaminants during construction and decommissioning on fish and shellfish receptors can be scoped out of the ES.</p>
4.3.4	Paragraph 5.4.44	Direct disturbance resulting from construction within the array (Construction and	<p>Para 5.4.29 states that the proposed development may impact on less mobile species such as whelk, lobster and scallop. This stands at odds with para 5.4.44 which states "<i>Species present that will be subject to</i></p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		Decommissioning)	<i>disturbance are likely to be mobile and can therefore move away from the construction activities.</i> " In the absence of information such as evidence demonstrating clear agreement with relevant consultation bodies, the Inspectorate does not agree to scope this matter out. Accordingly, the ES should include an assessment of this matter where significant effects are likely.
4.3.5	Paragraph 5.4.45	Underwater noise as a result of operational turbines (Operation)	The Inspectorate is content that there is unlikely to be significant effects from underwater noise during operation and therefore agrees that this matter can be scoped out of the fish and shellfish assessment.
4.3.6	Paragraph 5.4.46	Direct disturbance resulting from maintenance within the array area during operation and maintenance (Operation)	<p>The Inspectorate does not consider there is sufficient information in the Scoping Report to support scoping out direct disturbance resulting from maintenance within the array area and the offshore cable corridor during operation (for example frequency, duration and nature of such activities).</p> <p>Depending on the nature of the maintenance works and the species present in the area there could be a likely significant effect which should be assessed as part of the ES on the basis of the anticipated maintenance programme.</p>
4.3.7	Paragraph 5.4.46	Direct disturbance resulting from maintenance within the offshore cable corridor during operation and Maintenance (Operation).	The Inspectorate is content that there is unlikely to be significant effects from maintenance within the offshore cable corridor during operation and therefore agrees that this matter can be scoped out of the fish and shellfish assessment.
4.3.8	Paragraph 5.4.47	Potentially reduced fishing pressure within the Proposed Development array area and increased fishing pressure outside the array area due	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that displacement is only expected to be short term in duration (construction phase) and of limited spatial extent as part of

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		to Displacement (Operation).	the wider study area. Relevant matters are considered as part of scope of the commercial fisheries section.

ID	Ref	Other points	Inspectorate's comments
4.3.9	Paragraph 5.4.16	Baseline - Receptors	It is noted that baseline section of the Scoping Report does not clearly identify the conservation status of the fish and shellfish species discussed. The ES should identify, value, and assess impacts on protected species and species of conservation concern, where significant effects are likely.
4.3.10	Paragraph 5.4.16	Receptors	There are locally important populations of undulate ray in the vicinity of the Proposed Development, and as such, impacts to undulate ray nursery grounds should be assessed within the ES.
4.3.11	Paragraph 5.4.6	Surveys	<p>The Scoping Report does not propose any updated fish or shellfish surveys as there is intent to rely upon data collected for Rampion 1. As Rampion 1 was completed in 2018, it is considered that the fish and shellfish numbers or species may have changed during this time, and potentially as a direct result of the operation of Rampion 1.</p> <p>The Inspectorate does not specifically agree it is appropriate that no additional data collection is required based on the information presented in the Scoping Report. The Inspectorate considers the need for fish and shellfish surveys to be updated should be specifically considered as part of the Evidence Plan Process and reported in the ES. The ES should then justify the validity of the evidence base in informing a robust assessment of significant effects.</p>

4.4 Benthic Subtidal and Intertidal Ecology

(Scoping Report section 5.5)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Paragraph 5.5.42	Accidental pollution events (Construction, Operation/ Maintenance and Decommissioning)	The Inspectorate agrees that, with the implementation of measures to limit any potential pollution incidents, any potential impacts on benthic subtidal and intertidal ecology are unlikely to result in significant effects and therefore further assessment is not required. However, the Inspectorate seeks assurances as to the detail of such measures that would be employed and how they would be secured and therefore considers that this detail should be described within the ES.
4.4.2	Paragraphs 7.4.2.19 5.5.43	EMF generated by inter array and export cables during operation.	<p>Although the Inspectorate notes the basis of the evidence provided to support the Applicant's proposed approach (Orpwood et al. (2015) and Armstrong et al. (2015)), the MMO and its technical advisors do not support these findings. The Inspectorate is of the view that uncertainties concerning operation effects of electromagnetic effects remain.</p> <p>The Inspectorate therefore does not agree that likely significant effects upon fish receptors from operational EMF can be excluded at this stage and this matter should remain scoped in to the ES.</p>
4.4.3	Paragraph 5.5.44	Noise pollution during construction related activities.	The Scoping Report provides limited evidence to support the request and nothing to demonstrate agreement with relevant consultation bodies. The Inspectorate is not in a position to agree to scope these matters from the assessment. Accordingly, the ES should include an assessment of these matters where significant effects are likely to occur.

ID	Ref	Other points	Inspectorate's comments
4.4.4	Table 5.5.2	Identification of sites and species	Table 5.5.2 identifies designated sites and their features which have been screened in for assessment and these include European and nationally designated sites. The ES should ensure that impacts on protected habitats and species (including, but not limited to, those protected under the Habitats Directive, Wildlife and Countryside Act 1981, NERC Act s41 habitats and species of principal importance), together with local Biodiversity Action Plan (LBAP) habitats and species and other habitats/species of conservation concern are assessed where significant effects are likely.
4.4.5	Table 5.5.3	C-45 cable burial	It is not yet confirmed which method of cable protection will be adopted for the proposed development, though it is noted that cable burial is the preferred option. The ES should explain the types of cable protection which could be used, and the associated impacts upon benthic subtidal and intertidal ecology.
4.4.6	Paragraphs 5.5.19 - 5.5.20	Baseline – subtidal sediments.	It is understood that of the eleven sites sampled, four supported levels of contaminants in excess of Action Level 1 for Arsenic and Chromium The ES should explain the significance of this finding, and the risk posed from any other contaminants found in the context of characterising the whole survey area.
4.4.7	Table 5.5.4	Non- indigenous species	The ES should include an assessment of the potential for the spread of non-indigenous species via the colonisation of hard substrates and for the Proposed Development to be used to reach the designated hard habitats in the adjacent Kingmere MCZ.

4.5 Commercial Fisheries

(Scoping Report section 5.6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Table 5.6.3, 5.6.32 – 5.6.33	Additional steaming to alternate fishing grounds	The Scoping Report proposes to scope this matter out of the ES on the basis that the impact will be localised and not significant due to the implementation of the mitigation measure to give adequate notification. The Inspectorate agrees that this matter can be scoped out of the impact assessment having regard to the likely magnitude and on the basis that significant effects are unlikely to occur.

4.6 Marine Mammals

(Scoping Report section 5.7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Table 5.7.3 and paragraph 5.7.28	Temporary Threshold Shift (TTS) risk during construction	<p>The Inspectorate agrees with the rationale and technical comments of the MMO in paragraphs 3.9.5 - 3.9.12 of their response the scoping consultation regarding the need for assessment of TTS (also supported by Natural England).</p> <p>The Inspectorate is of the view that were TTS to be excluded from underwater noise assessments, the risk of cognitive impairment (TTS) will not be reflected in the overall assessment of risk to marine mammals, despite evidence in literature to suggest the potential for significant harm to individuals.</p> <p>The ES should therefore assess impacts to TTS from the Proposed Development across all marine mammal species scoped into the assessment where significant effects are likely to occur.</p>
4.6.2	Table 5.7.3 and paragraph 5.7.30	Noise from cable laying, ground clearance, dredging etc during construction	<p>The Scoping Report seeks to scope out noise from these activities on the basis that noise impacts will be "low in terms of intensity and duration, with a very localised risk", and that that risk is effectively contained within the assessment of 'vessel disturbance' activity (and ZOI defined in that respect).</p> <p>Without further reference to durations and methodologies of such activities in relation to vessel disturbance, and empirical evidence of the magnitudes of noise impacts from these activities when compared to vessel noise, the Inspectorate does not agree that they can be scoped out on the basis of the information provided. The Inspectorate also considers that there is the potential that noise generated from these activities could combine with vessel noise resulting in an overall</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			larger impact and potentially more significant effect on marine mammals.
4.6.3	Table 5.7.3 and paragraph 5.7.31	Reduction in prey availability during construction and operation	<p>The Inspectorate is content that the potential for reduction in prey availability to result in a significant effect on marine mammals during operation can be scoped out of further assessment.</p> <p>The Inspectorate does not agree that such a conclusion is supported by the information available at this stage in respect of construction phase impacts. The Scoping Report states that there would be no significant direct effects on marine mammal prey species during construction (see the Benthic Ecology (5.5) and Fish and Shellfish Ecology (5.4) sections of the Scoping Report). The Inspectorate does not agree that significant indirect effects on marine mammals from loss of prey can be excluded at this stage.</p>
4.6.4	Table 5.7.3 and paragraph 5.7.33	Risks to marine mammals of accidental pollution	<p>The Applicant seeks to scope out the risks to marine mammals of accidental pollution occurring during construction, operation & maintenance or decommissioning of the Proposed Development the on the basis that a Marine Pollution Contingency Plan (MPCP) and emergency response plans to will be implemented in the unlikely event that any such incident occurs.</p> <p>The Inspectorate agrees that, with the implementation of such measures, any potential impacts on marine mammals are unlikely to result in significant effects and therefore further assessment is not required. However, the Inspectorate considers that the detail of such measures, including how they would be employed and be secured should be presented within the ES.</p> <p>The ES should include draft versions (with sufficient detail) of any plans containing such measures.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.5	Table 5.7.3 and paragraph 5.7.34	Disturbance to seal haul out sites during construction	<p>The Scoping Report seeks to scope impacts of the construction phase resulting in disturbance at a seal haul out sites. The baseline information shows that there is approximately 25-30km between the Proposed Development and the harbour haul out sites.</p> <p>The Inspectorate does not consider that sufficient evidence has been provided to support the contention that significant effects on haul out sites can be ruled out due to the separation distance. As set out in item 4.6.13 below, the spatial extent of the study areas for marine mammals are yet to be fully defined by the Applicant therefore the Inspectorate considers it is premature to agree to scope out such effects from further assessment at this stage. The ES should include this assessment where significant effects are likely to occur.</p>
4.6.6	Table 5.7.3 and paragraph 5.7.35	Effects on marine mammals due to EMF during operation	<p>The Inspectorate agrees that significant effects on marine mammals due to direct effects of EMF are unlikely during operation of the Proposed Development and agrees that this matter can be scoped out of further assessment.</p> <p>However, the Inspectorate notes that indirect effects from changes to prey availability from EMF (in terms of fish and benthic ecology) during operation will be considered .</p>

ID	Ref	Other points	Inspectorate's comments
4.6.7	5.7.4, 5.7.8	Zones of Influence (ZoI) and study areas	<p>The ZoI for assessment of effects on marine mammals are stated as to be defined "once project specific underwater noise modelling has been completed".</p> <p>The Inspectorate considers that different cetacean species may require different ZoI's and study areas to be defined and notes that</p>

ID	Ref	Other points	Inspectorate's comments
			<p>species have different Management Units. The ES should describe the approach to defining ZoI and study area across all species with reference to the outcomes of the evidence plan process.</p> <p>The relevant species for consideration in the context of the Proposed Development are harbour porpoise, bottlenose dolphin, white-beaked dolphin, common dolphin and minke whale, as informed by previous studies and experience from Rampion 1. As per the comments raised in sections 2 and 3 of the Scoping Report, reliance on an evidence base from Rampion 1 will need to be explained and evidenced as to how it remains temporally and spatially applicable.</p>
4.6.8	Paragraph 5.7.15	Baseline data	<p>Where the "constantly expanding" marine mammal evidence base is used to provide new or updated baseline data than is referred to in the Applicant's Scoping Report and this Opinion, these should be set out clearly in the ES including reference to agreement as part of the evidence plan process.</p>
4.6.9	Paragraph 5.7.22	Basis for scoping assessment	<p>Paragraph 5.7.22 omits any reference to seabed preparation works that may be required as set out in section 2 of the Scoping Report. The ES should consider the potential effects of such works on marine mammals.</p>
4.6.10	Paragraph 5.7.36 – 5.7.38	Cumulative assessment study area and scope	<p>The Applicant's proposed assessment of cumulative effects on marine mammals does not make specific reference to the study area(s) (which is still to be defined) for each species. Paragraphs 5.7.36 – 5.7.38 explain that the study area for cumulative effects remains "to be defined through evidence of potential connectivity".</p> <p>There is no specific reference to spatial and temporal overlap between construction of the Proposed Development and the Aquind interconnector and the operation and maintenance activities associated with Rampion 1. These matters should be assessed in the</p>

ID	Ref	Other points	Inspectorate's comments
			ES where significant effects are likely.

4.7 Offshore Ornithology

(Scoping Report section 5.8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	Paragraph 5.8.42	Disturbance and displacement: maintenance of offshore export cable during operation.	The Inspectorate is content that there is unlikely to be significant effects from maintenance of the offshore export cable during operation and therefore agrees that this matter can be scoped out of the assessment.
4.7.2	Paragraph 5.8.42	Disturbance and displacement: maintenance of the intertidal export cable during operation.	The Inspectorate is content that there is unlikely to be significant effects from maintenance of the intertidal export cable during operation and therefore agrees that this matter can be scoped out of the assessment.
4.7.3	Paragraph 5.8.43	Barrier effect: Array –The presence of the array area could create a barrier to movements of breeding seabirds during foraging trips or to migratory movements. (Operation).	The Scoping Report provides limited information and no evidence of agreement with relevant consultation bodies to scope this matter out of the ES. The Inspectorate does not agree to scope these matters from the assessment. Accordingly, the ES should include an assessment of these matters where significant effects are likely to occur.

ID	Ref	Other points	Inspectorate's comments
4.7.4	Paragraph 5.8.4	Study Area	The study area for offshore ornithology is described as being the Proposed Development array survey area with a 4km buffer, the export cable corridor and the cable landfall area. The Inspectorate considers that the study area should be extended to take into consideration potential impacts on birds species which may use the area for foraging and not just on migration as suggested in para

ID	Ref	Other points	Inspectorate's comments
			5.8.7. It is recommended that effort should be made to agree the scope of the study area with relevant consultation bodies.
4.7.5	Paragraphs 5.8.5, 5.8.11 and figures 5.8.3 – 5.8.6	Surveys	<p>The Inspectorate notes that aerial digital surveys are being undertaken to provide information regarding ornithological species in the study area. Details should be provided of the methodology used to undertake the surveys. This information should be clearly presented in the ES. The Applicant should make effort to agree the scope and adequacy of these surveys with relevant consultation bodies.</p> <p>Paragraph 5.8.5 and figures 5.8.3 – 5.8.6 show that a small part of the eastern area of the offshore study area has not been covered by digital survey. The ES should justify the extent of survey areas in supporting a robust assessment of significant effects on displacement of bird populations.</p>
4.7.6	Paragraph 5.8.14	Collision Risk Modelling (CRM)	The exact method for CRM has not yet been defined. The ES and/or accompanying technical appendices should provide detailed information regarding the methodology undertaken for the CRM and analysis of the data used to inform the impact assessment, together with figures where appropriate.
4.7.7	Paragraph 5.8.44	Cumulative effects	The ES should contain details of other developments assessed in the cumulative effects assessment. Given the far ranging nature of breeding and migratory birds, justification should be provided as to the spatial and temporal extent of the other projects considered.

4.8 Underwater Noise

(Scoping Report section 5.9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1		n/a	n/a

ID	Ref	Other points	Inspectorate's comments
4.8.2	N/a	Underwater noise assessment	<p>The Inspectorate welcomes the consideration of underwater noise and vibration during the construction, operation and decommissioning phases of the Proposed Development. Effort should be made to agree the methodology with the relevant consultation bodies and agreements should be clearly outlined within the ES.</p> <p>Early engagement with the MMO is encouraged to ensure that any noise modelling utilising site-specific physical parameters and project specific detail is appropriate and fit for purpose.</p>
4.8.3	Paragraph 5.9.12	Baseline	<p>The baseline environment should be established beyond simply referring to the relevant aspect chapters where this information is presented. Potential noise and vibration impacts should be assessed against that baseline, noting that the underwater noise assessment draws entirely upon baseline data in other aspect chapters. The methods and noise propagation modelling software should be detailed within the ES; along with the project specific detail that it utilises with reference to spatial, temporal and physical design envelopes.</p>
4.8.4	Paragraph 5.9.1	Cross-references	<p>The Inspectorate welcomes the collaboration with the other relevant aspects as set out in paragraph 5.9.1 of the Scoping Report. The ES should include appropriate cross-references between aspect chapters</p>

ID	Ref	Other points	Inspectorate's comments
			and avoid duplication and contradictory information.
4.8.5	N/a	UXO	<p>The possible modelling of noise from UXO is not referenced in this section. Elsewhere in the Scoping Report there is reference to UXO surveys yet to be conducted and that UXO removal may be required.</p> <p>The ES should therefore consider the potential for UXO underwater noise impacts of the Proposed Development where significant effects are likely to occur (including cumulative effects with other underwater noise producing activities).</p>

4.9 Shipping and Navigation

(Scoping Report section 5.10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
N/a	N/a	N/a	No matters have been proposed to be scoped out of the assessment

ID	Ref	Other points	Inspectorate's comments
4.9.1	Paragraph 5.10.4	Study area	<p>The Applicant explains that the study area "will be reviewed and potentially amended in response to such matters as refinement of the offshore components, the identification of additional impact pathways and in response where appropriate to feedback from consultation".</p> <p>The Inspectorate is unclear as to what refinement of offshore components or identification of additional impact pathways could occur that would lead to amendment of the study area. The ES should clearly set out the study area with reference to the "standard" 10nm buffer that is stated (and its basis within relevant legislation and guidance).</p>
4.9.2	Paragraphs (and 5.3.34 – 5.3.36, and 5.15.40)	Recreational users	There is a high degree of overlap in the assessment of effects on offshore recreational users as set out in sections 5.3 (other marine users) section 5.10 (shipping and navigation) and section 5.15 (socio-economics). The Inspectorate expects that these matters will be considered as part of the assessment(s) of inter-related effects as set out in paragraph 4.4.40 of the Scoping Report.
4.9.3	Paragraph 5.10.11	Significance criteria	The International Maritime Organization (IMO) Formal Safety Assessment (FSA) guidance will be followed when assessing impacts to shipping and navigation receptors, assessing each impact in terms

ID	Ref	Other points	Inspectorate's comments
			<p>of frequency and consequence (Table 5.10.1).</p> <p>The ES should clearly set out how the risk assessment approach leads to an assessment of significance of effect consistent / compatible with the terminology as set out in Figure 4.1 of the Scoping Report.</p>
4.9.4	n/a	NRA hazard workshops	<p>The Inspectorate notes the apparent importance of the "hazard workshop[s]" subsequent to the Scoping Opinion in refining the approach to the assessment.</p> <p>The scope, outcomes and agreements reached during this meeting should be specifically set out in the ES and NRA (eg in the form of technical appendices or other standalone reports).</p>
4.9.5	Paragraphs 5.10.19 and 5.10.29	Marine aggregate dredging areas	<p>The ES should explain how the assessment has factored in shipping and navigation effects on the nine marine aggregate dredging areas intersecting the study area.</p> <p>It is unclear if such effects are to be considered part of the 'baseline' conditions or whether a future baseline is required accounting for changes in dredging activity,. Such effects may also need to be considered as part of the cumulative effects assessment of combined effects of the Proposed Development and aggregate activity on other receptors.</p> <p>The Inspectorate notes the Applicant's identification of a "significant marine aggregate dredging route...within the north-west of the study area" in this regard.</p>

4.10 Nature Conservation

(Scoping Report section 5.11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	Table 5.11.5 and paragraph 5.11.39	Direct impacts to designated features (other than Climping Beach SSSI)	<p>Direct impacts to nature conservation features of designated sites are scoped out of further assessment on the basis that there is no physical overlap of between the Proposed Development and designated site (other than Climping Beach SSSI, direct effects to which are scoped in to the assessment).</p> <p>The Inspectorate agrees with the Applicant that direct effects can be excluded on this basis and considers that indirect effects will be assessed appropriately as set out in table 5.11.5 of the Scoping Report (subject to relevant comments in this Opinion).</p>

ID	Ref	Other points	Inspectorate's comments
4.10.2	Paragraph 5.11.2	Interfaces with other aspect chapters	<p>The Inspectorate recognises that there will be a high degree of overlap between the proposed assessment of 'Nature conservation' as a standalone aspect chapter and several other aspects as listed in paragraph 5.11.2. This is also demonstrated by Table 5.11.5 of the Scoping Report (likely significant nature conservation effects) where it is explained that all baseline requirements will be covered by the individual aspect assessments (ie no additional data is required for the nature conservation aspect chapter).</p> <p>The Inspectorate also notes the interface with the assessment of terrestrial ecology (section 6.6 of the Scoping Report, which is not listed in paragraph 5.11.2) as well as standalone HRA and WFD assessments that are proposed.</p>

ID	Ref	Other points	Inspectorate's comments
			<p>The Applicant should ensure the scope and content of the assessment is clearly framed with this in mind in order to avoid an overly complex assessment across a number of aspect chapters. Cross referencing should be used in order to avoid duplication and ease presentation of material for stakeholders.</p>
4.10.3	<p>Paragraphs 5.11.25, Table 5.11.3 and Figure 5.11.3.</p>	<p>MCZ assessment</p>	<p>The Scoping Report identifies the spatial relationship of the Proposed Development to Marine Conservations Zones (MCZs) in Table 5.11.3 and Figure 5.11.3.</p> <p>Although that the requirements for standalone MCZ assessment(s) under the Marine and Coastal Access Act (MCAA) are sperate to the EIA process, the Inspectorate expects a coordinated approach to the assessment of effects on MCZs in the ES and any separate assessment under the MCAA.</p>
4.10.4	<p>Paragraph 5.11.14</p>	<p>Non-statutory marine nature conservation sites</p>	<p>Potential effects Marine Local Wildlife Sites (LWS) should be considered and assessed as part of this aspect chapter where significant effects could occur. This should include the Waldrons Marine LWS, Shelley Rocks Marine LWS, and HMS Northcoates Marine LWS.</p>
4.10.5	<p>Paragraph 5.11.18</p>	<p>Sussex WFD coastal water body</p>	<p>Reference is made to the WFD coastal water body and designated bathing waters, but no further reference is made to the assessment of effects to be reported within the scope of the Nature Conservation ES chapter.</p> <p>The potential for significant effects on this designation should be presented as part of the ES chapter, with appropriate cross reference to other aspect chapters (and standalone WFD reports) as required.</p>
4.10.6	<p>Paragraph 5.11.21</p>	<p>Southern North Sea SAC</p>	<p>The marine mammal "management unit scale" study area described in the section 5.7 of the Scoping Report identifies the Southern North</p>

ID	Ref	Other points	Inspectorate's comments
			Sea SAC as being relevant to the Proposed Development. On this basis, the Inspectorate would expect to see the SAC included in the assessment of potential significant effects in the nature conservation assessment chapter of the ES.

4.11 Civil and Military Aviation

(Scoping Report section 5.12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Table 5.12.3 and paragraph 5.12.46	Construction / operation of offshore export cables and inter-array cables	The Inspectorate agrees that significant aviation effects from construction and operation of the offshore cabling are unlikely and can be scoped out of further assessment.
4.11.2	Table 5.12.3 and paragraph 5.12.47	Impacts on civil and military radar systems during construction	<p>On the basis that WTG rotors will be static during construction and would not interfere with radar systems, the Scoping Report suggests that there is no impact pathway during construction.</p> <p>The Inspectorate agrees that this can be scoped out on this basis and on the basis that the operational assessment effectively encompasses consideration of any significant effects during construction.</p>
4.11.3	Table 5.12.3 and paragraph 5.12.48	Physical presence and operation of the WTGs leading to impacts on Licensed Airfields with surveillance radar	<p>On the basis that there are no licensed airfields with a surveillance radar within 30km of any part of the WTG array area, the Applicant seeks to scope this matter out of further assessment.</p> <p>Whilst the Applicant is proposing additional consultation with stakeholders as to the scope of the assessment, the Inspectorate does not consider it appropriate to agree to scoping this matter out on the basis of an arbitrary 30km distance at this stage. The Inspectorate does not consider that sufficient justification has been provided to exclude effects beyond 30km (for example with reference to defined consultation zones). The ES should assess this matter where significant effects are likely to occur.</p>
4.11.4	Table 5.12.3 and	Physical presence and operation of the WTGs leading to impacts on	On the basis that there are no no-radar licensed aerodromes within or close to the relevant 12 and 17km consultation distances set out, the

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
	paragraph 5.12.50	Non radar licensed aerodromes.	Inspectorate agrees that this matter can be scoped out of further assessment.
4.11.5	Table 5.12.3 and paragraph 5.12.53	Physical presence and operation of the WTGs leading to impacts on other civil aviation activities (excluding Search and Rescue (SAR))	<p>Given the location of the WTGs at least 12km offshore, the Scoping Report identifies that there will be no effects on light aircraft landing strips, gliding sites, microlight sites or parachute sites.</p> <p>The Inspectorate agrees that significant effects during operation are unlikely and can be scoped out of further assessment on this basis.</p>
4.11.6	Table 5.12.3 and paragraph 5.12.54	Physical presence and operation of the WTGs leading to impacts on SAR flight operations	<p>The Scoping Report seeks to rely on an Emergency Response and Cooperation Plan (ERCOP) and appropriate lighting, marking and notification, in line with CAA regulations (to be applied and secured for the Proposed Development) to exclude significant effects.</p> <p>In absence of the detail of an ERCOP and the other measures proposed, the Inspectorate cannot rely on their content as justification for scoping this matter out of the ES. The Inspectorate also notes the potential combined effect on SAR of the construction and operation of the Proposed Development and Rampion 1 and this should be assessed within the ES.</p>
4.11.7	Table 5.12.3 and paragraph 5.12.55	Physical presence and operation of the WTGs leading to impacts on MoD facilities (airfields, ADRs and danger areas)	<p>Based on the information provided in paragraphs 5.12.31 – 5.12.34, the Scoping Report suggests that it is “evident” that there is sufficient distance from the Proposed Development to rule out significant effects on MoD facilities.</p> <p>Paragraph 5.12.55 also states that there are no air defence radars within a “relevant distance of Rampion 2” although such a distance is not defined.</p> <p>The Inspectorate does not consider sufficient technical and evidence based information has been provided to agree that effects on MoD facilities entirely, not least because the Applicant refers to further</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			consultation with the MoD as part of the scoping process (and potentially beyond). The ES should assess these matters where significant effects are likely to occur.
4.11.8	Table 5.12.3 and paragraph 5.12.58	Physical presence and operation of the WTGs leading to impacts on Meteorological radar	On the basis that the nearest Met Office radar systems are located at c. 85km from the Proposed Development (in excess of the 20km safeguarded zone around each), the Inspectorate agrees that significant effects are not likely to occur and that this matter can be scoped out of the ES.
4.11.9	Table 5.12.3 and paragraph 5.12.59	Construction, operation and decommissioning effects on civil and military flight operations	<p>The Scoping Report relies on the requirement for aviation lighting (with differentiation between aviation and maritime lighting) to be put in place and secured as part of the design of the Proposed Development to justify scoping out this matter.</p> <p>In absence of the detail of these measures (and the need for further consultation in this regard), the Inspectorate cannot rely on their content as justification for scoping this matter out of the ES at this stage. The Inspectorate also notes the potential combined effect of the construction and operation of the Proposed Development and Rampion 1 and this should be assessed as part of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.11.10	Paragraphs 5.12.3 – 5.12.4	Study area	<p>Figure 5.12.1 does not actually depict the proposed study area, and does not provide a key making it difficult to depict and identify the features set out on the complex basemap (and which are then described listed in the baseline conditions section).</p> <p>The ES should provide a clear definition of the study area (including if / how it varies across the various matters considered in the</p>

ID	Ref	Other points	Inspectorate's comments
			assessment (ie civil and military aviation receptors). Supporting figures should more clearly identify the location(s) of these receptors.
4.11.11	Paragraph 5.12.18	Significance criteria	<p>The Applicant explains that "significance criteria for aviation impacts are typically difficult to establish", and that further details of the assessment of significance will be provided in the PEIR and ES.</p> <p>The Inspectorate is therefore not able to make any comments on the proposed approach, but expects that the Applicant would define such criteria so that they are compatible with the approach and terminology as set out in section 4 and figure 4.1 of the Scoping Report.</p>
4.11.12	Paragraph 5.12.37	NATS En-route PLC radar infrastructure	<p>The Inspectorate refers the Applicant to the comments of NATS En-route PLC and the potential effects identified by them on radar infrastructure at Pease Pottage and both the "London Area Control Centre" and "London Terminal Control Centre" Air Traffic Control Centres (ATC).</p> <p>The Inspectorate notes that further consultation will be required in order to enable suitable mitigation (paragraph 5.12.37). The ES should set out how the design and / or other measures secured as part of the Proposed Development propose to mitigate assess these effects.</p>

4.12 Seascape, Landscape and Visual

(Scoping Report section 5.13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.121	Table 5.13.5, paragraphs 5.13.108 - 5.13.109	Effects the construction and operation of the offshore elements of the Proposed Development on seascape character areas MCA09, MCA12, MCA14.	The Inspectorate agrees that this matter can be scoped out of the seascape, landscape and visual assessment on the basis that these MCA's are likely to experience low levels of change, with limited visibility of offshore elements of the Proposed Development. Significance of effects on MCA08, MCA13 and MCA06 will be assessed (as shown on Figure 5.13.4).
4.122	Table 5.13.5, paragraphs 5.13.112 – 5.13.116	<p>Effects the construction and operation of the offshore elements of the Proposed Development on landscape character</p> <ul style="list-style-type: none"> • LCAs within Surrey and Kent. • New Forest National Park • Surrey Hills AONB, • Hamstead Heritage Coast, • Tennyson Heritage Coast. 	The Inspectorate agrees that this matter can be scoped out of the seascape, landscape and visual assessment on the basis of the justification in paragraphs 5.13.112 – 5.13.116 (there is limited/no visibility of the offshore elements of the Proposed Development)
4.123	Table 5.13.5, paragraph 5.13.110	Effects of the offshore elements of the Proposed Development on certain Special Qualities of South Downs National Park (SDNP) during operation	The Inspectorate agrees that this matter can be scoped out of the SLVIA in relation to special qualities 2 (A rich variety of wildlife and habitats including rare and internationally important species) and 4 (An environment shaped by centuries of farming and embracing new enterprise).

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			However, in respect of special qualities 5 (Great opportunities for recreational activities and learning experiences) and 6 (Well-conserved historical features and a rich cultural heritage), the Inspectorate does not consider it is appropriate to scope these out of the SLVIA and these matters should be assessed in the ES.
4.124	Paragraph 5.13.117	Cumulative seascape, landscape and visual effects of the offshore elements of the Proposed Development with other operational, consented and application stage offshore wind farm projects (with the exception of Rampion Wind Farm)	The Inspectorate is content that there is unlikely to be a significant cumulative seascape, landscape and visual effects of the Proposed Development with other windfarm projects; with the exception of Rampion 1 and therefore agrees that this matter can be scoped out of the seascape, landscape and visual assessment.
4.125	Paragraph 5.13.118	Seascape, landscape and visual effects of the offshore elements of the Proposed Development outside the 50km radius SLVIA study area.	The Inspectorate is content that there is unlikely to be significant effects outside of the 50km radius SLVIA study area and therefore agrees that this matter can be scoped out of the seascape, landscape and visual assessment.

ID	Ref	Other points	Inspectorate's comments
4.126	Paragraph 5.13.74	Dark skies assessment	The ES should contain an assessment of the impact which the Proposed Development may have on dark skies. It would be helpful if a Figure were included to show the study area which is considered for this. Agreement with relevant consultation bodies should be evidenced in the ES.
4.127	Paragraph 5.13.82 and	Viewpoint selection	The Scoping Report acknowledges that the Proposed Development would be visible from the Isle of Wight, particularly at those locations

ID	Ref	Other points	Inspectorate's comments
	Figure 5.13.5		which are at higher elevations. Only one viewpoint has been selected for the Isle of Wight. The south east of the Isle of Wight has areas of high ground which overlook the Channel and where views of the Proposed Development could be afforded. Effort should be made to agree the locations of the viewpoints with relevant local planning authorities and other consultation bodies that might be affected to ensure impacts from long reaching views have been assessed at relevant representative viewpoints.
4.128	Paragraph 5.13.88	Long distance paths	The ES should also include effects of views from the Isle of Wight Coastal path as a sensitive receptor. This coastal path encircles the island and allows for views across the Proposed Development site.

4.13 Marine Archaeology

(Scoping Report section 5.14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.1	Table 5.14.8 and paragraphs 5.14.35 – 5.14.37)	Removal of sediment containing undisturbed archaeological contexts during seabed preparation for foundations	<p>The impacts proposed to be scoped out in Table 5.14.8 are on the basis of "embedded environmental measures to be adopted for the Proposed Development, forming commitments by RWE to avoid all identified archaeological receptors of a medium or high archaeological potential".</p> <p>This will be through the establishment of archaeological exclusion zones (AEZs) of an "appropriate size and extent" and 'tertiary' mitigation in the form of archaeological written schemes of investigation (WSI) and project specific reporting protocol for unexpected discoveries. The embedded measures are listed in table 5.14.7 and summarised as follows:</p> <ul style="list-style-type: none"> • A marine WSI (in accordance with an Outline Marine WSI), including a protocol for archaeological discoveries) • Offshore geophysical surveys (including UXO survey) will be undertaken prior to construction covering 100% of the development area. • Offshore geotechnical surveys will be undertaken prior to construction, including geoarchaeological assessment and analysis of data (inclusive of publication), • Offshore export cable corridor and the array cabling will be routed to avoid any identified archaeological receptors (with buffer zones as to be detailed in the WSI). <p>The Scoping Report does not provide specific detail in respect to these measures but they are acknowledged to constitute recognised</p>
4.13.2		Penetration of piling foundations resulting in total or partial loss of undisturbed archaeology	
4.13.3		Compression of stratigraphic contexts containing archaeological material from combined weight of foundation, transition piece, tower, and wind turbine.	
4.13.4		Disturbance of sediment containing potential archaeological receptors (material and contexts) during the laying of inter-array and export cables	
4.13.5		Penetration and compression effects of jack-up barges and anchoring of construction vessels during WTG, sub-station or cable installation leading to total or partial loss of archaeological	

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		receptors (material or contexts)	methods of control for the impacts described (with reference to relevant guidance in paragraphs 5.14.11 - 5.14.12).
4.13.6		Penetration and compression effects on seabed caused by corrective and preventative operation and maintenance activities (via jack-up vessels)	The Inspectorate is content that if the above measures are adequately secured (with reference to implementation) and presented in sufficient detail then they may be relied upon as means to demonstrate an absence of significant effect in the ES. In this regard, the Inspectorate expects that the "outline" WSI would form part of the DCO application documents and that this document and the ES would provide additional detail to what "appropriate size and extent" of AEZs would comprise and where they would be located.
4.13.7		Penetration and compression effects of jack-up barges and anchoring of decommissioning vessels leading to total or partial loss of archaeological receptors (material or contexts)	The Applicant should make efforts to agree the detail in relation to these measures with relevant consultation bodies, and the Inspectorate welcomes the Applicants intent in this regard, for example through the evidence plan process.

ID	Ref	Other points	Inspectorate's comments
4.13.8	Tables 5.14.1 – 5.14.3	Worst case assumptions / receptor sensitivity	Based on the baseline information presented in tables 5.14.5 and 5.14.6 and the receptor sensitivity criteria, the Inspectorate understands that unmitigated impacts of the Proposed Development could be of high significance. In setting out the proposed mitigation measures as considered above, the Applicant should acknowledge worst case assumptions in respect receptor sensitivity of potentially unidentified archaeological assets including those identified through geophysical survey.
4.13.9	Paragraphs 5.14.10, 5.14.45 and	Site specific surveys	The Inspectorate notes an important distinction between geophysical survey and geotechnical survey coverage. Paragraph 5.14.45 states "geophysical survey data covering 100

ID	Ref	Other points	Inspectorate's comments
	5.14.46		<p>percent of the seabed within the development area, currently expected to be undertaken June / July 2020". However, paragraph 5.14.46 implies the only a "limited coverage survey" will be undertaken in support of the Application and that 100 percent coverage of the final design plan will be completed and reviewed prior to construction.</p> <p>The "limited coverage" geophysical survey to support the DCO application is not specifically quantified as a percentage of the development area. This should be presented as part of the ES.</p> <p>The basis for, and point at which, the "comprehensive programme of geotechnical survey data" would commence in terms of informing considering archaeological potential (and coverage of geotechnical survey) is not specifically stated. The Inspectorate understands that detailed geotechnical surveys will be undertaken prior to construction and that the outline WSI will set out it's specification so as the reliance placed on it at as mitigation in addressing potentially significant effects can be understood.</p> <p>The marine archaeological assessment chapter of the ES should clearly set out the geoarchaeological considerations in the design and specification of the geotechnical survey.</p>

4.14 Socio-economics

(Scoping Report section 5.15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.14.1	Table 5.15.16 and Paragraphs 5.15.52 – 5.15.54.	Impact on population structure due to increased demand for labour during construction, operation and decommissioning	The Inspectorate considers that the impacts of construction, O&M and decommissioning activity on changes to population structure as a result of increased demand for labour and the subsequent demand for housing accommodation are likely to be negligible and any effects will be spread further wider than the immediate area. The Inspectorate agrees that these matters can be scope scoped out from the ES as significant effects are unlikely to occur.
		Impact on the demand for housing, accommodation and local services during construction, operation and decommissioning	
4.14.2	Table 5.15.16 and Paragraphs 5.15.52 – 5.15.54.	Impacts on inshore recreation activity during operation	<p>The Inspectorate agrees that significant effects on inshore recreation activity during operation are unlikely and that the ES will assess operational effects in terms of offshore recreation.</p> <p>However, reference to ZoIs and study areas are made in paragraph 5.15.13 and table 5.15.1, without reference to spatial extent of "inshore" and "offshore" areas (see comments under 4.14.3 below).</p> <p>Without fully understanding the extent of the inshore area as defined in the context of the socio-economic assessment (and the noted need for an assessment of offshore operational effects on recreation), the Inspectorate cannot agree to scope this matter out of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.14.3	Paragraph	Study areas	Whilst Table 5.15.1 summaries the ZOIs to be considered for the various receptor groups as part of the socio-economic assessment,

ID	Ref	Other points	Inspectorate's comments
	5.14.5		figures would assist in understanding their spatial extent and the entirety of the study area (onshore and offshore).
4.14.4	Paragraphs 5.15.8 – 5.15.14	Assessment methodology	<p>Any key assumptions made in developing estimates on the anticipated construction programme and phasing should be clearly set out and consideration given to a 'worst case' scenario in the duration and definition of 'temporary' effects and in considering the overall significance of effect (eg around the amounts of goods and services to be sourced locally / regionally / nationally).</p> <p>This includes assumptions on the use of local ports for construction. Reference is made to the development of "two scenarios based on varying assumptions in the amounts of goods and services sourced from within Sussex and the UK, in addition to the use of local ports". It is not clear whether the "two scenarios based on varying assumptions" are intended to represent alternative "realistic" scenarios, or whether they are "best case" / "worst case" in terms of local, regional or national impacts. This should be set out clearly in the ES.</p>
4.14.5s	Table 5.15.3	Key sources of socio-economic data	<p>A number of sources set out in table 5.15.3 are stated as "TBD" , including Recreational activity and Ports and harbour infrastructure for which the coverage of the study area is also stated as "TBD". It is unclear whether these datasets would be obtained in the course of data collection from other aspect chapters.</p> <p>The ES should clearly set out these data sources and their spatial coverage and how all of these have been derived from and the effort made to agree with relevant consultation bodies.</p>
4.14.6	N/a	West Sussex County Council Economic Growth Plan 2018-2023	The ES should take account of the current West Sussex County Council Economic Growth Plan 2018-2023 in considering baseline conditions and assessing significance of socio-economic effects.

5. ASPECT BASED SCOPING TABLES - ONSHORE

5.1 Landscape and Visual Amenity

(Scoping Report section 6.2)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.1.1	Table 6.2.4	Effects of the cable corridor and Landfall during operation upon landscape and visual receptors within 2km.	The Scoping Report states that the cable corridor will be reinstated and restored post construction. There are insufficient details in the Scoping Report to understand the type of landscape features which may be lost during the construction phase and also no details of the types of planting which may not be allowed during reinstatement (for example, lack of tree planting on and near to the cable corridor). The cable corridor may look very different during operation as it did pre-construction. On this basis, the Inspectorate does not agree to scope this matter out.
5.1.2	Paragraph 6.2.57	Receptors beyond the Zone of Theoretical Visibility	The Scoping Report states that any receptors beyond the Zone of Theoretical Visibility will not have a view of the onshore elements and impacts are therefore scoped out. The information provided in the Scoping Report lacks detailed information from which to be able to fully understand what the ZTV applied is. The ES must include a clear figure of an appropriate scale and size to present the ZTV as well as justification for definition of study areas and sensitive receptors within the ZTV.

ID	Ref	Other points	Inspectorate's comments
5.1.3	Paragraph 6.2.8	Study Area	A 2km study area is proposed on the basis that the same study area was used for Rampion 1. The study area for the Proposed

ID	Ref	Other points	Inspectorate's comments
			Development should be applied taking into account specifics for the area around the proposed cable route.
5.1.4	Figures 6.2.1 - 6.2.4	Scale of figures	The scale of the figures provided in the Scoping Report show the route of the cable corridor in its entirety and it is therefore difficult to understand which landscape receptors may be affected. The ES should contain figures at a scale which would ensure that the content is more easily understood.
5.1.5	Table 6.2.2	Key sources of LVIA data	The Inspectorate expects the assessment to have regard to the Strategy for the West Sussex Landscape; Local Distinctiveness Study of West Sussex as well as the High Weald AONB Management Plan 2019-2024.
5.1.6	Figure 6.2.3 and paragraph 6.2.39	High Weald AONB	High Weald AONB is shown in Figure 6.2.3 to be in the study area for LVIA, however paragraph 6.2.39 state that this is beyond the study area. On the basis that the nature, scale and location of the works at the proposed and existing substations (including connection between them) are not fully defined at this stage, an assessment of significant effects on the AONB should be provided as part of the ES (including cross reference to the SLVIA and socio-economic assessments).
5.1.7	Paragraph 6.2.40	Receptors	There are no details provided in the Scoping Report regarding landscape effects on community amenities, or schools. The ES should assess impacts on all receptors groups and the location of those receptors which have been assessed should be included in clear figures at an appropriate scale.
5.1.8	Paragraph 6.2.38	Baseline Zone of Theoretical Visibility	The Scoping Report refers to impacts beyond and in the ZTV, however it is not currently clear what the ZTV for onshore works and the substation are as no ZTV has been prepared. The ES should provide details of the ZTV for all onshore workings and assessments should be

ID	Ref	Other points	Inspectorate's comments
			made for impacts during construction, operation and decommissioning.
5.1.9	Paragraph 6.2.48	Impacts of the substation	The proposed substation location is identified as being 'near to' the existing Bolney substation. With approximate dimensions of 300m x 150m x 15m, the effects on landscape and visual amenity of this new structure by itself and any cumulative impacts with the existing substation and other existing or proposed structures, should be assessed in the ES.
5.1.10	Paragraph 6.2.51	Loss of landscape features	The Scoping Report states that loss of landscape features such as trees, hedgerows, Ancient Woodlands will be avoided "where possible". A tree survey and hedgerow survey should be completed to inform the ES. The ES should assess the impacts if such features are to be removed and explain any mitigation measures to reduce impacts.
5.1.11	Paragraph 6.2.48	Trenches	The Scoping Report states that up to 4 trenches will be required for the installation of the onshore corridor. The ES should report the number of trenches to be used and also dimensions of each and how long they would remain open for. The intention is to use trenchless techniques where possible; the ES should assess the landscape effects which may be created by open trenches.
5.1.12	Paragraph 6.2.59	Cumulative assessment	The ES should include all different types of development which may lead to a cumulative impact, not just those which are similar in nature to the Proposed Development. Details of agreements with relevant consultation bodies as to the scope of projects to be included should be presented as part of the ES.
5.1.13	Paragraph 6.2.74	Baseline	Efforts should be made to agree the location of viewpoints to assess impacts from the onshore cable corridor during construction and

ID	Ref	Other points	Inspectorate's comments
			operation with relevant consultation bodies. Details of the agreement should be included in the ES.
5.1.14	Paragraph 6.2.76	Baseline	It is noted that computer models will be used to inform the LVIA assessment, and the ES should contain details of these various methods used to inform the landscape and visual assessment.
5.1.15	Paragraph 6.2.84	Night time lighting	The night time lighting assessment should be appended to the ES together with evidence of consultation with relevant bodies. Visual representations should also be included.

5.2 Air Quality

(Scoping Report section 6.3)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.2.1	Paragraph 6.3.30	Emissions of air pollutants from construction and decommissioning equipment on site.	<p>The Scoping Report proposes to scope out an assessment of air quality impacts from the on-site construction and decommissioning equipment.</p> <p>This conclusion is not justified through the provision of mobile plant and construction equipment numbers and details. The Applicant should provide specific details of the equipment required on site with justification for scoping them out of the assessment against relevant guidance and criteria.</p> <p>The Inspectorate also notes that there is further work to be done in terms of refinement of the route, locations of construction compounds and the location of the substation. Whilst these (and thus proximity to air quality sensitive receptors) are uncertain, the Inspectorate considers it premature to rule out likely significant effects during construction and decommissioning.</p>
5.2.2	Paragraph 6.3.31	Emissions of odour from construction, operation and decommissioning	<p>The Inspectorate is content that there is unlikely to be significant emissions of odour during construction and therefore agrees that this matter can be scoped out of the air quality assessment. The Inspectorate notes the Applicant's intention at commitment C-6 to avoid areas of historic landfill through the design and DCO order limits and the agreement that this can be scoped out is on this basis.</p>
5.2.3	Paragraph 6.3.32	Emissions of air pollutants during operation.	<p>The Inspectorate is content that there will be no significant emissions associated with the onshore cable or substation during operation and maintenance and this matter to be scoped out of the air quality</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			assessment. However specific details should be provided on the amount of road traffic associated with the operational Proposed Development and how these relate to the IAQM/EPUK screening values set out in paragraph 6.3.3. With reference to the description of the Proposed Development, any potential sources of emissions from the proposed substation should also be set out in demonstrating significant effects on receptors sensitive to air quality can be ruled out.
5.2.4	Paragraph 6.3.33	Emissions of dust during operation	The Inspectorate is content that there is unlikely to be significant emissions of dust during operation and therefore agrees that this matter can be scoped out of the air quality assessment.

ID	Ref	Other points	Inspectorate's comments
5.2.5	Table 6.3.5	Sensitive ecological receptors	The ES should set out the relevant ZoIs within which ecological effects from the construction works will be considered (both in terms of the cable route and substation works).
5.2.6	Paragraph 6.3.3	Study area/AQMAs	The Inspectorate agrees with the methodology for designating the proposed study area set out in paragraph 6.3.3. The study area for the assessment should be sufficiently broad to ensure that all receptors which could experience a significant effect are captured within the assessment. The ES should consider how traffic and transport due to construction of the Proposed Development would contribute to air quality levels in the relevant AQMAs. Effort should be made to agree the extent of the study area with relevant consultation bodies and justified within the ES.
5.2.7	Paragraph	Baseline/monitoring	The Scoping Report provides limited information regarding the need

ID	Ref	Other points	Inspectorate's comments
	6.3.15		<p>for surveys in order to characterise the baseline environment or otherwise inform the Air Quality Assessment. Paragraph 6.3.15 claims that existing data sources are sufficient to characterise the baseline air quality, without the need for further monitoring. Effort should be made to agree the requirement for additional baseline survey data with the relevant consultation bodies.</p> <p>The Applicant should set out in the ES any proposals for air quality monitoring of emissions from the Proposed Development during construction.</p>
5.2.8	Paragraph 6.3.39	Mitigation	<p>The Inspectorate would expect an Air Quality Management Plan to form part of the CoCP. The Applicant should ensure that drafts of these documents, demonstrating the minimum measures relied upon as mitigation, are submitted with the ES and appropriately secured.</p>
5.2.9	Paragraph 6.3.13	Emissions of dust from construction/decommissioning	<p>The Inspectorate is satisfied with the methodology proposed, which is based on the Institute of Air Quality Management's (IAQM) (2014) Guidance on the assessment of dust from decommissioning and construction. The assessment should include an examination of effects on both human and ecological receptors.</p>
5.2.10	6.3.40	Emissions of air pollutants from construction/decommissioning traffic on roads	<p>The Inspectorate is satisfied with the methodology proposed, which is based on industry standard guidance (IAQM and Environmental Protection UK (EPUK)) and includes the assessment of effects on both human and ecological receptors. Paragraph 6.3.46 states that 'It is likely that the construction and decommissioning road traffic will be below IAQM thresholds for scoping out.' If this is the case the ES should include justification for its exclusion from the ES.</p>
5.2.11	N/A	Relationship between air quality assessment and TA	<p>The air quality assessment should be informed by the TA and the projects transport consultants particularly with regards to defining the study area and the potential impact from vehicle movements during</p>

ID	Ref	Other points	Inspectorate's comments
			both construction and operation.

5.3 Soils and Agriculture

(Scoping Report section 6.4)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.3.1	Paragraph 6.4.34	Loss of agricultural land due to operational and maintenance and decommissioning activities.	The Inspectorate is content that there is unlikely to be a significant loss of agricultural land due to operational and maintenance or decommissioning activities and therefore agrees that this matter can be scoped out of the soils and agriculture assessment.
5.3.2	Paragraph 6.4.34	Loss of soil due to operational and maintenance activities.	The Inspectorate is content that there is unlikely to be a significant loss of soil due to operational and maintenance activities and therefore agrees that this matter can be scoped out of the soils and agriculture assessment.

ID	Ref	Other points	Inspectorate's comments
5.3.3	Paragraph 6.4.12	NPPF	<p>The Inspectorate welcomes the use of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the National Policy Planning Framework (NPPF).</p> <p>The Inspectorate also expects that 'soils' should be considered under a more general heading of sustainable use of land and the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.</p>
5.3.4	N/A	Mitigation	It is considered that the handling, storage and reinstatement of soil should be conducted in accordance with a Soil Management Plan (SMP) which sets out good practice mitigation to minimise adverse effects on the soil resource. The Applicant should refer to guidance set

ID	Ref	Other points	Inspectorate's comments
			<p>out in the Department for Environment, Food and Rural Affairs (DEFRA) 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'.</p> <p>The Scoping Report identifies that a SMP is planned in Chapter 6.2, however, there was no references to this in Chapter 6.4. The Inspectorate welcomes and encourages consistent cross references between the aspect chapters.</p> <p>The ES should address how soils and agriculture will be managed and describe any assumptions made. Any mitigation required should be explained in the ES and appropriately secured.</p>
5.3.5	N/A	Cross-reference with other disciplines	<p>The consideration of the potential impacts on agricultural land should also be assessed in the context of socio-economics, namely those financial effects on productive farmland and small holdings during construction, operation and decommissioning. With this in mind, the Inspectorate welcomes the acknowledgement of the inter-relationship between the socio-economic and soils/agriculture.</p>
5.3.6	Paragraphs 6.4.23 and 6.4.20	Baseline	<p>The Scoping Report commits to onsite soil survey/sampling. The Inspectorate welcomes this survey and recommends that effort should be made to agree the survey locations with relevant consultation bodies.</p>
5.3.7	N/A	Siting of the onshore infrastructure	<p>Careful consideration should be given to the siting of the onshore infrastructure in relation to grade 1 and grade 2 agricultural land; the potential temporary and permanent loss of Agricultural Land Classification (ALC) land should be assessed within the ES. The potential effects on soil quality should be considered and relevant mitigation measures proposed where significant effects are likely to occur.</p>

5.4 Noise and Vibration

(Scoping Report section 6.5)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.4.1	Paragraph 6.5.47	Increases in noise from site traffic for substation and wind farm maintenance.	Based on the anticipated low levels of site traffic during operation and maintenance, the Inspectorate is content that there will be no significant noise emissions associated with the onshore cable or substation maintenance in terms of additional site traffic during operation.
5.4.2	Paragraph 6.5.49	Onshore noise disturbance as a result of the offshore substations. (operation)	The Inspectorate agrees that noise effects of the offshore substation would not have significant effects for any onshore receptors. The Inspectorate is satisfied that the scope of the underwater noise assessment is sufficient to consider offshore substation noise effects on offshore and marine receptors where significant effects are likely to occur.
5.4.3	Paragraph 6.5.50	Vibration disturbance from the operation of the onshore and offshore substations and WTGs (operation)	The Inspectorate agrees that vibration effects to onshore receptors as a result of the offshore substations and WTGs can be scoped out of further assessment. The Inspectorate does not agree that vibration effects from the onshore substation scoped out as insufficient justification has been provided at this time to support this approach (including operational design parameters of the proposed substation). The ES should assess these matters where significant effects are likely to occur.
5.4.4	Paragraph 6.5.51	Noise and vibration disturbance from removal of equipment and reinstating sites, including associated traffic noise and	The Scoping Report has scoped out Noise and vibration disturbance during decommissioning works on the basis that the effects of decommissioning will be lower than those experienced during construction. The Inspectorate does not agree that this can be scoped

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		vibration effects	out at this stage as the noise and vibration effects and subsequent mitigation have not been quantified for the construction phase. Although the noise and vibration disturbance during decommissioning works are likely to be similar or potentially lower than during construction, the ES should assess these matters where significant effects are likely to occur. .

ID	Ref	Other points	Inspectorate's comments
5.4.5	Paragraph 6.5.31	Baseline	<p>Paragraph 6.5.31 of the Scoping report states that 'Once the locations of the Proposed Development have been decided upon, the existing data will be reviewed to ascertain its potential use in the assessment'. The Inspectorate expects a project specific baseline survey, with the assessment methodology and choice of noise receptors should be agreed with the relevant local planning authorities.</p> <p>The Applicant's attention is directed to the Joint Guidance produced by the Association of Noise Consultants (ANC) and the Institute of Acoustics (IoA) "Joint Guidance on the Impact of COVID-19 on the Practicality and Reliability of Baseline Sound Level Surveying and the Provision of Sound & Noise Impact Assessments during the current COVID-19 pandemic".</p>
5.4.6	Paragraph 6.5.4	Study area	<p>Paragraph 6.5.4 of the Scoping Report states that the spatial scope of the construction noise assessment would be "a 1 km buffer zone around the cable route potential centreline and substation boundary". The Inspectorate expects further explanation and justification be provided in the ES to support the study area used for the assessment with reference to specific receptors or groups of receptors.</p>

ID	Ref	Other points	Inspectorate's comments
5.4.7	N/A	Construction vehicles and equipment	Information should be provided on the types of vehicles and plant to be used during the construction phase. The assessment should consider a 'worst case' for receptors, i.e. that within the application site the vehicles and plant are located at the closest possible point to a receptor.
5.4.8	N/A	Ecological receptors	The Inspectorate notes that there is little reference to other receptor types that may be sensitive to noise and vibration, such as ecological receptors. The Inspectorate welcomes consideration of noise impacts on nature conservation areas and other ecological receptors (e.g. protected species). The noise assessment should cross-refer to the findings of other relevant aspect chapters, such as terrestrial ecology and offshore ornithology. The ES should clearly explain any assumptions made regarding the assessment of likely significant effects arising from noise and vibration on sensitive ecological receptors
5.4.9	N/A	Mitigation measures	The scoping report sets out that a CoCP and decommissioning plan will be developed as part of the DCO application. No mention is made however of a noise mitigation plan. The Inspectorate expects that such a plan or specific noise mitigation measures would be set out and secured through the CoCP or otherwise where they are relied upon in the assessment of significance of residual effects.

5.5 Terrestrial Ecology and Nature Conservation

(Scoping Report section 6.6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.5.1	Table 6.6.12	Land take / land cover change of European sites within the ZOI.	The Inspectorate agrees that this impact can be scoped out on the basis that no land within a European site(s) will be lost as a result of the Proposed Development. No European sites are within the redline boundary as shown on Figure 6.6.4.
5.5.2	Table 6.6.12 and 7.4.2.19	Fragmentation of habitat - impacts on Pagham Harbour SPA.	<p>Pagham Harbour SPA is located over 10km from the proposed landfall point. States that due to distance, it suggests that black bellied Brent geese are not linked to the SPA.</p> <p>The Inspectorate agrees that this matter can be based on the distance between the designated sites and the proposed landfall point. Natural England also agree that this matter can be scoped out on the basis of the distance of 10km being an established upper foraging distance for Brent geese.</p>
5.5.3	Table 6.6.12	Fragmentation of habitat – effects on shoveler, teal and wigeon features of the Arun Valley SPA	<p>The paragraph numbers to which the reader is referred (6.6.56 – 6.6.59) appears to be incorrect.</p> <p>Although literature is cited in support of the Applicant's position, the Inspectorate does not agree to scope out habitat fragmentation effects on these features of the SPA. The Inspectorate does not consider that sufficient evidence has been provided to demonstrate that the cable route would not affect or cause deterioration to land that could support these species and be functionally linked to the SPA and as such its loss or deterioration resulting from the Proposed Development's cable route could have an impact on the SPA and should be assessed in the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.5.4	Table 6.6.12	Pollution events on European sites.	The only European site within 2.5km of the scoping boundary is the Solent and Dorset Coast SPA (designated for tern species). On the basis of the embedded measure C-76, the Inspectorate agrees that this matter can be scoped out.
5.5.5	Table 6.6.12	Emissions associated with construction traffic and plant on all relevant ecological features (European sites and SSSIs)	<p>The Inspectorate agrees that this matter can be scoped out based on the temporary and transient nature of the effect, the location of the nearest European sites and SSSI's and the limited amount of traffic likely serving construction at any single location.</p> <p>The Inspectorate also notes that this approach in line with advice from Natural England as cited in paragraph 6.6.68, and Natural England have not expressed concern in their scoping consultation response relating to the Proposed Development.</p>
5.5.6	Table 6.6.12	Introduction of non-native species to European Sites.	The Scoping Boundary does not overlap with any European sites, so it is agreed that these matters can be scoped out. However the possibility for the spread of non-native invasive species via watercourses to designated sites which are hydraulically linked should be assessed within the ES where significant effects are likely to occur.
5.5.7	Table 6.6.12	Land take/land cover change of SSSIs and LWS outside of the Scoping Boundary.	The Inspectorate agrees that this matter can be scoped out on the basis that there would be no land take or land cover changes outside of the scoping boundary..
5.5.8	Table 6.6.12	Fragmentation of habitats – on SSSIs outside of the Scoping Boundary	<p>The Scoping Report is seeking to scope out all SSSIs which are not located within the Scoping Boundary, features would not be expected to move regularly between the designated sites and the construction area.</p> <p>The Inspectorate does not agree that this matter can be scoped out as insufficient justification has been provided. The ES should assess this</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			matter where significant effects are likely to occur.
5.5.9	Table 6.6.12	Increased noise and vibration on SSSIs outside of the Scoping Boundary.	The Inspectorate does not agree that impacts as a result of noise and vibration should be scoped out for all SSSIs outside of the red line boundary. Some of the SSSIs scoped in by the Applicant have interest features which could be impacted by vibration and noise generated by the proposal some of which have the potential to be transient between areas and SSSI's outside of the redline boundary. The ES should assess this matter where significant effects are likely to occur.
5.5.10	Table 6.6.12	Increased light impacts on SSSIs.	No SSSIs within 5km of the Scoping Boundary have been found to support bat species as designated features. The foraging distance of some bats species extends further than 5km and as such the Inspectorate does not agree to scope this out as insufficient justification has been provided. The ES should assess this matter where significant effects are likely to occur.
5.5.11	Table 6.6.12	Changes in hydrology for SSSIs and LWS	Impacts on changes to hydrology to SSSIs and LWS outside of the ZoI (deemed as 1km for this matter) are proposed to be scoped out. The Inspectorate does not agree that this matter can be scoped out as insufficient justification has been provided at this time to support this approach. The ES should ensure that hydrological impacts are assessed where significant effects are likely with further justification around the appropriateness and extent of the 1km ZoI.
5.5.12	Table 6.6.12	Pollution events on SSSIs.	There are no SSSIs within 500m of the scoping boundary. On the basis of the embedded measure C-76, the Inspectorate agrees that this matter can be scoped out of the ES as significant effects are unlikely to occur..
5.5.13	Table 6.6.12	Introduction of non-native invasive	The possibility for the spread of non-native invasive species via

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		species to SSSIs and LWS which are outside of the Scoping Boundary.	watercourses to designated sites which are hydraulically linked should be assessed within the ES.
5.5.14	Table 6.6.12	Fragmentation of habitats – on LWS outside of the Scoping Boundary	The Inspectorate agrees that this matter can be scoped out on the basis that there would be no land take or direct effects to habitat outside of the scoping boundary.
5.5.15	Table 6.6.12	Increased light levels at LWS	The Inspectorate does not agree that this aspect can be scoped out as insufficient justification has been provided at this time to support this approach.
5.5.16	Table 6.6.12	Pollution events on LWS outside of the ZOI (500m)	On the basis of the embedded measure C-76, the Inspectorate agrees that this matter can be scoped out.
5.5.17	Paragraph 6.6.67	Breeding birds	<p>The Inspectorate considers that insufficient information is provided to support the scoping out of breeding birds from assessment entirely at this stage.</p> <p>The Inspectorate understands the embedded environmental measures in place to maintain legal compliance in this regard. However, the proposed working corridor for onshore cable installation (of up to 50m, and wider in respect of special crossings) as well as construction and operation of the onshore substation could require considerable destruction of habitat suitable for breeding birds.</p> <p>The Inspectorate therefore expects the ES to the detail such measures that would be employed and how they would be secured . The ES should assess this matter where significant effects are likely to occur.</p>

ID	Ref	Other points	Inspectorate's comments
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ID	Ref	Other points	Inspectorate's comments
5.5.18	Paragraph 6.6.49	Fish species	The onshore cable corridor will pass near to or through existing watercourses, where trenched and / or special crossings may be required. The impacts of the Proposed Development upon fish species should be assessed in the ES. This should include impacts on migratory species such as eel, sea lamprey and sea trout. Cross reference should be provided to offshore fish and shellfish.
5.5.19	Paragraph 6.6.30	Beneficial effects	Where the Applicant concludes beneficial / positive effects which are reliant on successful implementation of biodiversity improvement / enhancement measures, evidence will need to be provided in the ES that the decision maker can be confident in their delivery thorough the DCO and / or other supporting legal mechanisms
5.5.20	Table 6.6.12	EMF	The ES Applicant should also assess any potential for likely significant effects to wildlife through altered thermal and EMF from buried cables, to which no reference is made in the Scoping Report (with cross reference to the Soils and Agriculture aspect chapter).

5.6 Transport

(Scoping Report section 6.7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.6.1	Table 6.7.8	Hazardous Loads during construction, operation and decommissioning	The Inspectorate agrees that this matter can be scoped out on the basis that no hazardous loads are anticipated by the Applicant during construction or operation of the Proposed Development.
5.6.2	Table 6.7.8	Operation and maintenance activities resulting in potential impact on roads, Public Rights of Way (PRoW) and users of these routes.	<p>The Scoping Report advises that the operation and maintenance requirements of the onshore part of the Proposed Development would be occasional and therefore there would only be a limited number of vehicle movements. Whilst no further quantification of vehicle movements during operation has been provided, the Inspectorate is content that such activities will be below the threshold at which potentially significant effects could occur.</p> <p>Paragraph 6.7.49 of the Scoping Report does not provide any justification as to operational effects on PRoW. Whilst the impacts in this regard are likely to be predominantly experienced during construction, the ES should also consider the potential for significant effects during operation including (eg as a result of permanent diversions / changes to PRoW around the cable route and substation).</p>
5.6.3	Table 6.7.8	Decommissioning activities resulting in a potential impact on local roads, PRoW and the users of these routes.	<p>The Scoping Report has scoped out potential impact on local roads, PRoW and the users of these routes during decommissioning works on the basis that the effects of decommissioning will be lower than construction.</p> <p>The Inspectorate is unable to agree that this can be scoped out at this stage as the effects and subsequent mitigation have not been quantified for the construction phase. Although the transport impacts during decommissioning works would be similar or potentially lower</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			than during construction, the ES should assess these matters where significant effects are likely to occur.

ID	Ref	Other points	Inspectorate's comments
5.64	Paragraph 6.7.5	Study area	<p>The Scoping Report states that the study area for the transport assessment will consider the onshore elements of the Scoping Boundary (and the "key routes outside" of this boundary). Routes that construction and operational traffic will take will be reviewed and amended in response to refinement of the onshore.</p> <p>The Inspectorate recommends that the geographical extent of the study area (with particular reference to "key routes" outside the Scoping Boundary) is agreed with the relevant highways authorities and Network Rail (where applicable).</p>
5.65	Paragraph 6.7.17	Consultation	<p>The Inspectorate welcomes the Applicant's intention to agree the scope of assessment with the relevant consultation bodies. This is particularly important in agreeing the baseline position and the receptors which will be deemed sensitive in the assessment. It is also important that methodologies are justified, for example, why the Guidelines for the Assessment of the Environmental impact of Road Traffic (GEART) has been chosen over Design Manual for Roads and Bridges (DMRB). Where the scope differs from that requested by the relevant consultation bodies, the ES should provide justification for the alternative approach.</p>
5.66	Paragraph 6.7.26	Baseline surveys/COVID-19	<p>The Scoping Report makes limited reference to how data will be collected to form the baseline assessment. The Inspectorate would expect the Applicant to agree the scope of any further baseline</p>

ID	Ref	Other points	Inspectorate's comments
			<p>information to inform the assessment with the relevant authorities.</p> <p>The Inspectorate acknowledges the Applicants concerns regarding COVID-19 restrictions, the Applicant should refer to the advice provided in Section 3.4 of this Scoping Opinion.</p>
5.6.7	N/A	Rail network	<p>The transport assessment should include an assessment of the potential impact on the rail network. Figure 6.7.1 indicates that several operational railway lines would be crossed. The assessment should also consider the potential impacts of any construction or diversion activities on public transport.</p>
5.6.8	N/A	Onshore vehicle movements associated with marine works	<p>No information is provided regarding any onshore vehicular movements associated with marine elements of the work (if any, and particularly in reference to nearshore / intertidal works). These should be included within the ES where significant effects are likely to occur. It is noted in paragraph 6.7.2 of the Scoping Report that the scope of offshore transport effects (beyond mean high water springs) are proposed to be considered elsewhere in the ES).</p>
5.6.9	Paragraph 6.7.60	Mitigation	<p>The Inspectorate welcomes the commitment to produce a Construction Traffic Management Plan (CTMP), Abnormal Indivisible Load (AIL) access study and PRow Management Plan. Drafts of these documents should be provided with the DCO application. It should be clear how the implementation of such plans would be secured in the DCO and the Applicant should consider how this plan would interact with the CoCP and other relevant plans.</p>
5.6.10	N/A	Cross-referencing with other disciplines	<p>Any cross-referencing between aspect chapters should be clear within the ES and the Inspectorate welcomes the consideration of inter-relationships on traffic and transport.</p>

5.7 Ground Conditions

(Scoping Report section 6.8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.7.1	Paragraph 6.8.45	Construction activities located on, or adjacent to landfills and other potentially contaminated sites such as industrial/waste management facilities and fuel storage/distribution facilities (exposure to contamination via direct contact, inhalation and/or ingestion of soils and dusts resulting in health effects).	<p>The Inspectorate considers that given the nature of the development the conclusion is reasonable and therefore agrees that these matters can be scoped out of the assessment.</p> <p>This is based on the justification that any maintenance would be subject to The Construction (Design and Management) (CDM) Regulations 2015 and safe working practices as part of normal construction health and safety management under the Health and Safety at Work Act (1974) and regulations made under the Act.</p> <p>The Inspectorate agrees that, with the implementation of measures to limit any potential pollution incidents, any potential impacts on ground conditions are unlikely to result in significant effects and therefore further assessment is not required. However, the Inspectorate seeks assurances as to the detail of such measures that would be employed and how they would be secured and therefore considers that this detail should be described within the ES.</p>
5.7.2	Paragraph 6.8.45	Construction vehicle and equipment maintenance and storage of fuels/oils for construction vehicles and equipment (accidental spillages and leaks resulting in ground contamination and risks to human health).	
5.7.3	Paragraph 6.8.45	Operational vehicle and equipment maintenance and storage of fuels/oils for operational vehicles and equipment (accidental spillages and leaks resulting in ground contamination and risks to human health).	<p>The Inspectorate considers that given the nature of the development the conclusion is reasonable and therefore agrees that these matters can be scoped out of the assessment.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.74	Paragraph 6.8.45	Decommissioning activities including removal and reinstatement of the onshore substation (exposure to contamination via direct contact, inhalation and/or ingestion of soils and dusts resulting in health effects).	The Inspectorate considers that given the nature of the development (and likely activities during decommissioning) the conclusion is reasonable and therefore agrees that these matters can be scoped out of the assessment.
5.75	Paragraph 6.8.45	Decommissioning activities including removal and reinstatement of the onshore substation (accidental spillages and leaks resulting in ground contamination and risks to human health).	

ID	Ref	Other points	Inspectorate's comments
5.76	Paragraph 6.8.3	Study area	The Inspectorate notes that the study area proposed is provisional and will be reviewed and amended in response to such matters as refinement of the onshore components, the identification of additional impact pathways and in response, where appropriate, to feedback from consultation. The Inspectorate welcomes this approach and recommends that the ES should clearly define the chosen study area and provide a justification in support of its suitability.
5.77	Paragraph 6.8.19	Baseline	Table 6.8.6 of the Scoping Report sets out the data sources to be used to inform the baseline assessment. Effort should be made to agree the desk-based study area and need for site surveys (as may be

ID	Ref	Other points	Inspectorate's comments
			necessary according to the desk study outcomes) with relevant consultation bodies.
5.7.8	Paragraph 6.8.44	Assessment methodology	The Inspectorate notes the reference to the simple and detailed assessments which are 'analogous' to the stages of Land Contamination Risk Management (LCRM). The impact assessment should also include detailed and site-specific assessments to demonstrate that the risks to groundwater are acceptable, particularly in those areas identified as of greatest risk. Effort should be made to agree the approach to the assessment, including the simple and detailed assessment methodology and site-specific surveys, with the relevant consultation bodies, including the EA.
5.7.9	N/A	Conceptual Site Model	The Inspectorate notes that the term Conceptual Site Model (CSM) is included within the acronyms listed in the Scoping Report. However, there is no reference to a CSM within the Ground Condition section of the Scoping Report. The Applicant should seek to agree the scope of and coverage of any CSM with the EA and other relevant consultation bodies, as appropriate.
5.7.10	N/A	Preferential pathways	The ES should include specific consideration of any preferential pathways for pollution and contaminants that may be created as a result of the Proposed Development.

5.8 Historic Environment

(Scoping Report section 6.9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.8.1	Table 6.9.6	Effects on Heritage assets out with 1km of onshore landfall and cable route corridor.	<p>The Inspectorate agrees that effects on heritage assets out with 1km of the onshore landfall and cable route corridor can be scoped out of the assessment, particularly based on:</p> <ul style="list-style-type: none"> • The temporary and transient nature of onshore construction (and decommissioning) works; and • The limited nature of the visual effects during operation as a result of the landfall area (transition bays etc). <p>This does not include scoping out effects of the substation on the same basis (which should be included where significant effects could occur). This also includes the connection to the existing Bolney substation, particularly given that an overhead line connection does not appear to have been expressly ruled out by the Applicant).</p>
	Table 6.9.6	Effects of decommissioning and reinstatement of onshore substation on heritage assets out with 1km of the landfall and cable route corridor..	
5.8.2	Table 6.9.7	Adverse direct effects on heritage assets out with the scoping boundary.	The Inspectorate agrees that direct effects on assets outside of the scoping boundary can be scoped out of further assessment as there is no pathway for such direct effects.
5.8.3	Table 6.9.7	Adverse effects arising through change to setting of heritage assets out with the extended study area.	Noting the comments in box 5.8.4 below, the 'extended study area' has yet to be defined. Whilst the Inspectorate agrees with the logic and notes the intention to refine and agree this 'extended study area' to capture potential effects of the Proposed Development as necessary, the Inspectorate cannot agree to this being scoped out of the assessment as it's spatial extent is yet to be defined.

ID	Ref	Other points	Inspectorate's comments
5.8.4	Paragraphs 6.9.3 – 6.9.5	Extended study areas	Where an 'extended study area' will be used to identify heritage assets (to be determined through consultation with stakeholders and not purely based on an "arbitrary 5km or 10km boundary"), the definition and rationale for the selection of areas and relevant assets rather than simply the study area should be clearly explained.
5.8.5	Paragraphs 6.9.37	Baseline conditions at the landfall location	<p>Paragraphs 2.4.20, 6.9.37 and 6.9.38 explain that Palaeolithic remains and deposits, as well as elements of a Bronze Age rural landscape, have been exposed by coastal erosion close to the landfall location at Climping. The Inspectorate therefore considers that the area has high archaeological potential (and Historic England highlight the possibility for discovery of remains of national importance).</p> <p>The ES should provide an assessment of significance of effects on these undesignated archaeological remains and how this is taken into consideration as part of the overall selection process for the landfall area (and onshore route).</p>
5.8.6	Table 6.9.1	Sensitivity of receptors	Table 6.9.1 does not include a valuation for non-designated remains of national importance. On the basis of the information in that table, the Inspectorate understands that they would be classified as "high" sensitivity and the ES should consider the assessment of significance of effects on this basis.
5.8.7	n/a	Assessment of offshore effects on onshore heritage assets	<p>Section 6.9 of the Scoping Report is focused on only impact of the onshore works on heritage assets within the onshore works boundary. Limited information is provided in terms of assessment methodology of the potential impact of the offshore works on the settings of onshore heritage assets (which is not explicitly covered in the marine archaeology aspect chapter).</p> <p>The ES should present specific consideration of the potential for significant effects from offshore works during construction and</p>

ID	Ref	Other points	Inspectorate's comments
			operation on the setting of onshore assets (noting overlap with LVIA and SLVIA aspects).

5.9 Water Environment

(Scoping Report section 6.10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
5.9.1	Table 6.10.11	Construction, operation and maintenance and decommissioning activities resulting in a potential impact on groundwater level (excluding the proposed substation)	<p>The Inspectorate agrees that as a result of the limited land disturbance during the earthworks associated with the landfall-cable it is unlikely for such activities to culminate in significant effects on groundwater levels. This is also the case in respect of disturbance during the operational and decommissioning stages.</p> <p>The Inspectorate agrees that this matter can be scoped out of the assessment, with the exception of the proposed substation. The ES will assess the potential for significant effects on groundwater levels from the proposed substation as set out in Table 6.10.11</p> <p>However, the Inspectorate expects the ES will include an assessment of potential effects on groundwater quality during all phases and covering all aspects of the Proposed Development where significant effects are likely to occur.</p>

ID	Ref	Other points	Inspectorate's comments
5.9.2	N/A	Main river crossings	<p>The Scoping Report does not clearly identify the locations where the cable may cross below or run near a river. This should be detailed in the ES. Site-specific assessments for each location should also be undertaken to inform the cable crossing techniques at each main river and where significant effects may occur.</p> <p>Any mitigation and/or design measures relied upon for the purposes of the assessment should be explained in the ES and appropriately secured. Effort should be sought to agree proposed mitigation and</p>

ID	Ref	Other points	Inspectorate's comments
			reinstatement measures with the relevant consultation bodies.
5.9.3	N/A	Climate Change	The assessment in the ES should take into account the potential impacts of climate change using the latest UK Climate Projections (UKCP18). Effort should be made to agree the climate change model and future flood risk allowance baseline with relevant consultation bodies including the EA and lead local flood risk authority.
5.9.4	N/A	Impacts to flood defences	The ES should clearly include in the baseline, a description of existing (and where relevant, proposed) flood defences or flood alleviation measures that could be impacted or required by the Proposed Development.
5.9.5	N/A	Mitigation	Where site specific mitigation measures are to be implemented, the ES should describe the mitigation clearly. The ES should also outline how the mitigation measures will be secured through the DCO or other legal mechanism.
5.9.6	N/a	Offshore water quality considerations	<p>The Inspectorate notes that little consideration has been given to any potential effects of the Proposed Development on marine water quality specifically (only by proxy in terms of it's bearing on benthic and fish ecology, coastal processes and other relevant aspects).</p> <p>Paragraph 6.10.3 sets out that the study area will encompass surface water bodies (river and transitional) and groundwater bodies but not coastal bodies. The ES should include any potential impacts of the works on marine water and sediment quality, particularly with regard to the two designated in proximity of the proposed cable corridor and landfall site (including cross reference to any standalone WFD assessment and other relevant aspect chapters of the ES).</p> <p>The Inspectorate has also made comments to this effect in section 4.10 of this Opinion in respect of the proposed nature conservation</p>

ID	Ref	Other points	Inspectorate's comments
			aspect chapter.

6. INFORMATION SOURCES

6.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus⁴
- Planning Inspectorate advice notes⁵:
 - Advice Note Three: EIA Notification and Consultation;
 - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
 - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
 - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
 - Advice Note Nine: Using the 'Rochdale Envelope';
 - Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
 - Advice Note Twelve: Transboundary Impacts;
 - Advice Note Seventeen: Cumulative Effects Assessment; and
 - Advice Note Eighteen: The Water Framework Directive.

6.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

⁴ The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

⁵ The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES⁶

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	NHS Coastal West Sussex CCG
	NHS Horsham and Mid Sussex CCG
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	West Sussex Fire and Rescue Service
The relevant police and crime commissioner	Sussex Police and Crime Commissioner
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	Clymping Parish Council
	Littlehampton Parish Council
	Angmering Parish Council
	Lyminster and Crossbush Parish Council
	Poling Parish Council
	Arundel Parish Council
	Burpham Parish Council
	Patching Parish Council
	Findon Parish Council

⁶ Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Ford Parish Council
	Warningcamp Parish Council
	South Stoke Parish Council
	Hurstpierpoint and Sayers Common Parish Council
	Twineham Parish Council
	Bolney Parish Council
	Parham Parish Council
	Storrington and Sullington Parish Council
	Wiston Parish Council
	West Grinstead Parish Council
	Washington Parish Council
	Steying Parish Council
	Ashington Parish Council
	Ashurst Parish Council
	Henfield Parish Council
	Woodmancote Parish Council
	Shermanbury Parish Council
	Cowfold Parish Council
The Environment Agency	The Environment Agency
[The relevant] AONB Conservation Boards	High Weald AONB
The Joint Nature Conservation Committee	Joint Nature Conservation Committee
The Maritime and Coastguard Agency	The Maritime and Coastguard Agency
The Marine Management Organisation	Marine Management Organisation (MMO)
The Civil Aviation Authority	Civil Aviation Authority

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Relevant Highways Authority	West Sussex County Council
The relevant strategic highways company	Highways England - South East
The relevant internal drainage board	River Arun IDD
Trinity House	Trinity House
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	The Forestry Commission
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS⁷

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Group	NHS Coastal West Sussex CCG
	NHS Horsham and Mid Sussex CCG
The National Health Service Commissioning Board	NHS England
The relevant NHS Foundation Trust	South East Coast Ambulance Service NHS Foundation Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Dock and Harbour authority	Littlehampton Harbour
Lighthouse	Trinity House
Civil Aviation Authority	Civil Aviation Authority

⁷ 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	Southern Water
The relevant public gas transporter	Cadent Gas Limited
	Last Mile Gas Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
The relevant electricity generator with CPO Powers	Rampion Offshore Wind Limited
	Eclipse Power Network Limited

STATUTORY UNDERTAKER	ORGANISATION
	Last Mile Electricity Ltd
	Energy Assets Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	Southern Electric Power Distribution Plc
	UK Power Networks Limited
	National Grid Electricity Transmission Plc
The relevant electricity interconnector with CPO Powers	Aquind Limited
	National Grid IFA 2 Limited

TABLE A3: SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(1)(B))⁸

LOCAL AUTHORITY ⁹
Adur District Council

⁸ Sections 43 and 42(B) of the PA2008

⁹ As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY⁹
Arun District Council
Chichester District Council
City of Brighton and Hove
Crawley Borough Council
East Sussex County Council
Hampshire County Council
Horsham District Council
Lewes District Council
Mid Sussex District Council
Mole Valley District Council
South Downs National Park Authority
Surrey County Council
Tandridge District Council
Waverley Borough Council
Wealden District Council
West Sussex County Council
Worthing District Council

TABLE A4: NON-PRESCRIBED CONSULTATION BODIES

ORGANISATION
Royal National Lifeboat Institution
Portsmouth City Council
Isle of Wight Council
Havant Borough Council

ORGANISATION

Eastbourne Borough Council

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Aquind Limited
Arun District Council
Bolney Parish Council
City of Brighton and Hove
Clymping Parish Council
Crawley Borough Council
Havant Borough Council
Health and Safety Executive
High Weald AONB
Highways England
Historic England
Horsham District Council
Littlehampton Harbour
Littlehampton Parish Council
Marine Management Organisation (MMO)
Mid Sussex District Council
Ministry of Defence
National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG)
NATS En-Route Safeguarding
Natural England
Public Health England
Royal Mail Group

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Shermanbury Parish Council
South Downs National Park Authority
Surrey County Council
The Environment Agency
The Maritime and Coastguard Agency
Trinity House
Twineham Parish Council
Waverley Borough Council
West Sussex County Council



AQUIND Limited

AQUIND INTERCONNECTOR

Rampion 2 Scoping Consultation

Document Ref: 1231364

PINS Ref.: EN010117-000006

AQUIND Limited

AQUIND INTERCONNECTOR

PINS REF.: EN010117-000006

DOCUMENT: RAMPION 2 SCOPING CONSULTATION

DATE: 03 AUGUST 2020

DOCUMENT

Document	Rampion 2 Scoping Consultation
Revision	01
Document Owner	AQUIND Ltd.
Prepared By	Sarah Lister
Date	31 July 2020
Approved By	Vladimir Temerko
Date	03 August 2020

1. CONSULTATION RESPONSE

- 1.1.1.1. AQUIND Ltd. has been asked to provide a consultation response on the Scoping Report prepared by Rampion Extension Development Limited (RED) for an Order granting Development Consent for the Rampion 2 Offshore Wind Farm (the Proposed Development).
- 1.1.1.2. Natural Power Consultants Ltd. have prepared and submitted this consultation response on behalf of AQUIND Ltd. and in so doing, AQUIND Ltd. is aware of their duty under Regulation 11(3) of the EIA Regulations, if so requested by the Applicant, to make available information which is considered relevant to the preparation of the Rampion 2 Environmental Statement (ES).
- 1.1.1.3. From the information provided within the Scoping Report, AQUIND Ltd. do not envisage any interactions with the onshore components of Rampion 2 and AQUIND Interconnector. The main aspect of the response relates to the need for continued engagement between RED and AQUIND Ltd. project teams to address any potential interactions that might occur on the offshore aspects as the preliminary Rampion 2 proposals overlap a portion of the submitted AQUIND Interconnector Marine Cable Corridor.
- 1.1.1.4. AQUIND Ltd. are keen to ensure that RED adequately considers AQUIND Interconnector when designing and refining the proposals for Rampion 2, including any potential interactions during the construction and operational periods of both projects, as well as ensuring there is adequate consideration of how the proposals for Rampion 2 may give rise to cumulative effects in connection with AQUIND Interconnector within the cumulative effects assessment for the Rampion 2 project. These matters would be better dealt with through further direct engagement between RED and AQUIND Ltd. and their project teams as the proposals for Rampion 2 are developed.
- 1.1.1.5. The comments in Table 1 below provide some further information for RED in order to assist with their evolving design and preparation of Preliminary Environmental Information Report. It also highlights some errors in the Scoping Report that relate to the AQUIND Interconnector that are considered important for RED to understand in moving forward in their design and assessments.

Table 1: AQUIND Ltd. comments on Rampion 2 Scoping Report

Item No.	Reference	Comment
1	Section 2 The Proposed Development	<p>The scoping boundary is provided in Figure 1.1. and offshore infrastructure is identified in Table 2.2 however, the locations for different infrastructure and more detailed aspects of the Rampion 2 design still remain to be determined. Paragraph 2.2.3, states that <i>'the description of the Proposed Development continues to evolve through the key stages of design and the EIA process including the provision of Preliminary Environmental Information Report'</i>.</p> <p>Figure 2.7 also provides an indicative construction programme over a 5 year period (Year 1 through to Year 5) but at this stage, indicative dates for construction are still to be set. Furthermore, para. 2.4.9 states that <i>'where their proposals are currently spread over a number of seabed areas [as shown in Fig. 2.8], they do not wish to pre-judge whether the final proposals will lie wholly within one area or the other or comprise development within both areas.'</i> Para. 2.4.7 also states that RED are still in the process of finalising an Area for Lease with The Crown Estate (TCE) for additional areas of seabed required for the export cable corridor and adjoining cabling bridge.</p> <p>We recognise that the design of Rampion 2 is still evolving and further work and agreements are required before further detail on the design can be provided by RED. AQUIND Ltd. request continued engagement with RED in order to for us to understand their evolving design and address any potential interactions between the two schemes at an early stage. In particular, we would expect there to be a suitable stand-off distance between the two assets. Current guidance (European Subsea Cables Association (2016) Guideline No.6 – The Proximity of Offshore Renewables Energy installations & Submarine Cable Infrastructure in UK Waters) considers where separation distances of infrastructure are 1 nautical mile, stakeholders should engage to agree proximity limits. As such, should the project design and infrastructure for Rampion 2 overlap or be within 1 nm of the AQUIND Marine Cable Corridor, AQUIND Ltd. request further engagement to fully</p>

Item No.	Reference	Comment
		understand the potential impacts of Rampion 2 on the AQUIND Interconnector in relation to installation, survey and maintenance activities.
2	Section 4.4 Approach to EIA Paragraph 4.4.33	<p>Cumulative Effects Assessment: Paragraph 4.4.33 states that RED ‘<i>anticipate that the construction of the AQUIND Interconnector would not coincide with the construction of Rampion 2</i>’. The text within the bullet point states that the indicative programme for the AQUIND Interconnector suggests that ‘<i>the onshore construction will be complete by 2023 and offshore by 2022</i>’.</p> <p>We would like to highlight that this is incorrect and that the indicative programme submitted with the DCO Application can be found in Appendix 3.8 of the AQUIND Environmental Statement (Examination Library Ref: APP–362) which shows that offshore works for the interconnector are anticipated to be complete by the end of 2023, and onshore works complete by early to mid-2024. Given that start and finish dates of the indicative construction programme for Rampion 2 are not yet determined, it is not yet clear whether construction of the two schemes will coincide and this should be given consideration as RED evolve their design, and should form part of the discussions between AQUIND Ltd. and RED.</p>
3	Section 4.4 Approach to EIA Paragraph 4.4.34	<p>Cumulative Effects Assessment: RED state that ‘<i>further information will be gathered on the AQUIND Interconnector through further engagement</i>.’ We welcome that RED intend to undertake further engagement with AQUIND Ltd.</p> <p>In meeting the requirements of the Infrastructure Planning (EIA) Regulations 2017 and in accordance with the requirements of PINS Advice Note Seventeen, AQUIND Ltd. expect that RED will provide a comprehensive analysis of the potential direct and indirect cumulative environmental effects resulting from Rampion 2. RED are welcome to employ the detailed information provided within the AQUIND DCO Application documentation to inform their assessments and baseline reporting where relevant, and AQUIND Ltd., in meeting their duty under Regulation 11 (3) of the Infrastructure Planning (EIA) Regulations</p>

Item No.	Reference	Comment
		<p>2017 are happy to continue engagement with RED at their request to assist in their information gathering exercise relating to their design evolution and impact assessments relevant to the preparation of their Environmental Statement (ES).</p> <p>However, we also want to re-iterate the need for RED to consider the AQUIND Interconnector project at an early stage of the Rampion 2 project design so as not to significantly impact upon the construction and operation of AQUIND Interconnector and/or to give rise to significant cumulative effects in connection with AQUIND Interconnector.</p>
4	Section 5.3 Other Marine Users Paragraph 5.3.33 and References	<p>AQUIND Ltd. submitted a DCO application on 14 November 2019. In paragraph 5.3.33 and in the list of references, the reference used for the AQUIND Non-Technical Summary is 2017 which is incorrect. As such, we would advise that in undertaking any further information gathering related to the AQUIND Interconnector, that RED refer to the 2019 DCO application documentation including the ES (available online at: https://infrastructure.planninginspectorate.gov.uk/projects/south-east/aquind-interconnector/?ipcsection=docs) which provides much more detail than the Non- Technical Summary with regards programme and all phases of construction, operation and decommissioning of the AQUIND Interconnector.</p>
5	Section 5.3 Other Marine Users Paragraph 5.3.33	<p>Paragraph, 5.3.33, RED state that the AQUIND Interconnector is due to receive a decision in late 2020. Due to delays in DCO examination as a result of Covid 19, and in light of the new Rule 6 letter (dated July 3 2020), determination for AQUIND Interconnector is more likely to be Q3 2021.</p>
6	Section 5.3 Other Marine Users Paragraph 5.3.4	<p>In terms of study areas, RED states that <i>“as the position of existing offshore cables and pipelines are well known, the infrastructure and other users study area can be reduced to those exact locations. For each receptor described in this chapter, the spatial variability has been considered and an appropriate baseline description of that receptor’s study area is provided.”</i></p>

Item No.	Reference	Comment
		<p>However, there is not currently an exact location for the AQUIND final cable routes; the final cable routes will be determined post DCO grant but they will be located within the submitted Marine Cable Corridor. We would therefore encourage RED to assess against the AQUIND Marine Cable Corridor (as identified in Figure 3.1 of the AQUIND ES [APP-146] or the Works Plans [APP-010]) within which the cables will be installed. The extent of the Marine Cable Corridor to the 12 nautical mile limit also lies within the spatial extent of the AQUIND Option Agreement for a Licence of the seabed with The Crown Estate.</p>
7	Section 5.3 Other Marine Users Table 5.3.1	<p>This table lists the key sources of other marine users baseline data. Should the AQUIND Interconnector ES not be included in this table? In addition, Figure 5.3.5 shows an AQUIND copyright in the map in the top right hand corner but this is not listed in the data sources.</p>
8	Section 5.3 Other Marine Users Paragraph 5.3.29	<p><i>“The scoping exercise identified a number of subsea cables within the study area, but it should be noted that currently none overlap with the Scoping Boundary for Rampion 2.”</i> This is incorrect as the Scoping Report continues to describe AQUIND Interconnector in para 5.3.31 which does overlap the Scoping Boundary. Even though the AQUIND Interconnector is still considered as ‘proposed’, this sentence in 5.3.29 is misleading.</p>
9	Section 5.3 Other Marine Users Paragraph 5.3.16, Table 5.3.3, and Figure 5.3.3	<p>Similarly to the consideration of subsea cables in section 5.3.29, there seems to be inconsistencies in consideration of disposal sites. AQUIND Ltd. has been awarded registered marine disposal sites as part of the DCO application.</p> <p>While AQUIND disposal sites are illustrated in Figure 5.3.3 clearly overlap the Rampion 2 Scoping Boundary, it is not included in Table 5.3.3. The text in para 5.3.16 also states <i>‘Of the seven sites, two are directly within the study area, these are Littlehampton, which is located within the export cable search area (closed), and the existing Rampion 1 project disposal site’</i>. While we recognise that the AQUIND Interconnector application has not yet been determined at this stage, this text is misleading and the AQUIND Cable Disposal Site</p>

Item No.	Reference	Comment
		<p>A, which is contained within the AQUIND Interconnector Marine Cable Corridor is clearly located in the Rampion Scoping Boundary.</p> <p>The AQUIND marine disposal site codes are not shown in Table 5.3.3. and should include WI048 (site A as shown in Figure 5.3.3) and WI049 (site B as shown in Figure 5.3.3). This will be disposal of dredged material from the construction of the AQUIND Interconnector.</p>
10	<p>Section 5.3 Other Marine Users</p> <p>Paragraph 5.3.52</p>	<p>Further, para. 5.3.52 which is in the section <i>'Impacts scoped out of assessment'</i> states that there is <i>"currently no spatial overlap, or planned overlap, between Rampion 2 and other offshore energy infrastructures"</i>. Although we recognise that the AQUIND Interconnector is still a 'proposed' scheme (as opposed to planned schemes such as IFA2) and is still yet to be determined, RED has determined that <i>"there are no pathway for effects identified"</i>.</p> <p>It is not clear how no pathway for effects has been determined and based upon our current understanding of development timeframes, it is not clear whether the construction phases of both projects will coincide. As such, further consideration of the potential effects should be considered, including the potential for significant cumulative effects not just for 'Other Marine Users' but other relevant receptors / topic e.g. benthic ecology, marine mammals etc, where there may be potential for significant cumulative environmental effects.</p>

Kent, Richard

From: Neil Crowther <Neil.Crowther@arun.gov.uk>
Sent: 04 August 2020 09:30
To: Rampion2
Subject: FW: EN010117 Rampion 2 Offshore Windfarm EIA Scoping notification and consultation
Attachments: Letter to stat cons_Scoping & Reg 11 Notification.doc_Rampion2.pdf

Dear Planning Inspectorate

On behalf of Arun District Council, I would make the follow comments in response to this consultation;

- Firstly, the 4 week time period is exceptionally tight in which to get through 970 pages and to seek and obtain responses from relevant technical colleagues.
- Socio-economic – proposed developments in development plans are mentioned but not included anywhere within this section.
- Terrestrial ecology and nature conservation – appear to have missed a number of a couple of features. Within their 5km that has been set additional to the scoping area, there are Ferring Rife and Ferring-Goring gap Local Wildlife Site to the east. As a result these need to be added to Figure 6.6.6. These should be sourced from Sussex Biodiversity.
- Table 7.1 – A consistent approach is required throughout the table to provide absolute clarity. Specifically, within the first paragraph relating to activities and impacts scoped out for Terrestrial ecology and nature conservation, potential confusion can occur between ‘fragmentation of habitat for some SPAs’ and section 6.6, to cover exactly which SPAs this means, as there is no explanatory bracket following this as in paragraphs that follow. Recommended: Insertion of bracket (all SPAs outside of the Scoping Boundary) into first para of Terrestrial ecology and nature conservation.
- Details around the consideration of alternatives will be an important component of the ES. Arun DC will need to be satisfied that the chosen route is the most favourable based on the evidence and that there is sufficient justification for chosen route. One important element of this will be to demonstrate that alternatives have greater impacts on ecological designated sites.
- Arun understands that the development options considered include alternatives that intrude into the exclusion zone set aside as mitigation for the effects of Rampion 1.
- With reference to table 6.5.4 and commitment C-22 it is considered that the core working hours for construction, in order to protect residents’ amenity, should be between 0800 and 1800 hours on Mondays to Fridays as of course would generally be the case for building works in England.
- ADC would wish to understand and further discuss the extent of the likely effects on the beach area at Climping. Comments from WSCC confirm that, based upon the experience of Rampion 1, cable works at the HDD exit offshore, required works with plant, on a number of occasions at low tide, which required access to and from the beach and installation of temporary associated compounds on the beach.
- ADC would like to understand further the likely construction durations for each element of the Proposed Development, currently the onshore section of the programme is not clear for landfall, cable route, onshore substation and national grid connection works. The construction programme should be reviewed based on experience of Rampion 1, noting the increase in length of the cable route, additional number of trenches, and increase in substation size.
- Hedgerow and other potential ecological surveys, along with the ecological assessment itself, need to consider any proposed temporary accesses, including the visibility splays associated with these.

- Details of consultation will be important and we await these at the appropriate time. ADC would like to understand how local communities within the Scoping Boundary.

Regards, Neil

[Neil Crowther](#) | **Group Head of Planning, Arun District Council** | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

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From: Rampion2 <Rampion2@planninginspectorate.gov.uk>

Sent: 06 July 2020 14:43

Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping notification and consultation

Dear Head of Planning

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020, and is a statutory requirement that cannot be extended.

Regards

Karen Wilkinson
EIA and Land Rights Advisor
Major Casework Directorate
Direct Line: 0303 444 5072
Helpline: 0303 444 5000
Email: karen.wilkinson@planninginspectorate.gov.uk

Please note my working days are Monday, Thursday and Friday.

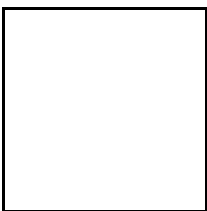
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Twitter: [@PINSgov](https://twitter.com/PINSgov)

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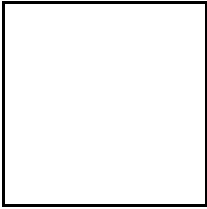
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Kent, Richard

From: Debbie Thomas <debbie.thomas@bolney.com>
Sent: 29 July 2020 12:50
To: Rampion2
Cc: Nicola Hanley
Subject: Rampion 2 - Ref: EN010117-000006

Dear Sirs,

Bolney Parish Council is grateful for the opportunity to comment on the Rampion 2 Scoping Report recently submitted to the Planning Inspectorate.

Bolney Parish Council ('the Parish Council') is very disappointed that the applicant Rampion Extension Development Ltd ('Rampion') is considering an extension of its existing offshore wind farm at a time when it has not yet completed the construction of the substation and associated mitigation planting for the first Rampion Wind Farm ('Rampion 1').

Rampion started clearing the Rampion 1 substation site in September 2014 and almost 6 years later, the residents of Bolney are still having to put up with construction traffic on the roads in the Parish, construction traffic lights and daily noise from construction vehicles working on the reinstatement of the fields that were used during construction as the access road to the Rampion 1 substation site.

The Rampion 1 project programme is now three and a half years behind schedule and the residents of Bolney are having to tolerate a sixth summer of construction noise impacting on the quiet enjoyment of their properties.

Bolney Parish lies in a quiet, rural and agricultural landscape. Over the last 6 years, the Parish Council and the residents of Bolney have experienced incredible frustration with the Rampion 1 project. Six years of continual construction traffic on the Parish roads and lanes, construction noise and breaches of the Requirements of the Rampion 1 DCO including:

- construction traffic not keeping to the consented Construction Traffic Management Plan;
- the unauthorised use of unsuitable narrow minor lanes in the Parish;
- Rampion not making good the damage done by construction vehicles to the surfaces and verges of local roads;
- breaches of the consented construction hours including working at weekends without permission;
- the use of generators without permission. At one point generators were running on the construction site 24 hours a day 7 days a week for more than 14 months;
- the use of construction lighting outside of agreed construction hours despite the area around the substation being designated an area of 'Dark Skies' by CPRE;
- discharging contaminated surface water from the substation construction site into local drainage ditches without permission or filtration resulting in diesel entering the local waterways and rivers;
- repeated complaints from Bolney (and Twineham) residents about noise from the construction site, construction vehicles and generators;
- due to the late running of the project, permission was sought and granted by West Sussex County Council to enable Rampion to work weekends (including Bank Holidays weekends) to catch up resulting in Bolney residents having to put up with construction noise 7 days a week throughout the summers of 2016, 2017, 2018 and 2019. At times the consented hours were also extended from 7am in the morning till 9.20pm at night;
- the mitigation planting plan designed to screen the electrical equipment in the Rampion 1 substation from local residencies is failing due to lack of maintenance and the plantings are not providing the screening needed for local properties.

Based on its experience with Rampion 1 and the impact the Rampion 1 construction programme had on the Parish's roads and residents, the Parish Council is very concerned about the adverse impact on the area of another substation and cable route for Rampion 2.

The Council therefore requests that the Rampion 2 Environment Statement must focus on the following issues for the benefit and protection of the Parish and its residents:

Landscape and visual impact

The landscape around the existing substations is rural and actively farmed. The Parish Council is very concerned that another substation site located close to the Rampion 1 substation and the Bolney National Grid substation will have an unacceptable cumulative landscape and visual impact on the area which cannot be mitigated by design or additional planting.

In particular the Parish Council is concerned that the field to the east of the Rampion 1 substation site owned by Rampion, and a potential site for the new Rampion 2 substation, is unsuitable for development given the topography in the area and the fact that the field rises in the local landscape. It is potentially visible from the High Weald Area of Outstanding Natural Beauty to the north of the village of Bolney particularly in winter without the screening from the deciduous trees. The field is also visible from several local properties including Listed Properties.

Noise and vibration

Noise has been a perpetual problem for Bolney residents during construction and operation of the Rampion 1 project.

Since Rampion 1 became operational in 2018, regular complaints have been made by residents to Rampion about the unacceptable levels of noise from the substation during its operation and the negative impact this is having on their lives. The Parish Council also raised concerns about the operational noise with WSCC in response to Rampion's proposed Noise Management Scheme for Rampion 1 in June 2018.

The Parish Council is therefore concerned at the prospect of another substation in the area and the unacceptable cumulative noise impact on nearby residents. It requests that particular attention be given to the potential for cumulative noise issues in the Environmental Statement.

Residents have reported noise surveys being carried out in the vicinity of the substations during the April/May period this year. As these surveys were carried out during the COVID19 lockdown when there was no background noise from overhead aircraft or from traffic on the local roads, any data collected will presumably be flawed and unreliable as a basis for calculation of noise levels in the area. The survey was also at a time when the very noisy pH Treatment Plant at the Rampion 1 substation was switched off for maintenance.

Any new noise surveys to be relied upon in support of the Rampion 2 project should be undertaken at a time when aircraft and road traffic are back to normal and when the pH Treatment Plant is in full operation.

Terrestrial ecology and nature conservation

As this is a rural area, the Parish Council requests that the Environmental Statement focus on the impact any new substation and connecting cable route will have on the wildlife and ecology in the Parish.

The ecological surveys carried out by Rampion for the Rampion 1 project identified that the Bolney and Twineham area boasts:

- hedgerows of high ecological value some of which are classified as 'Important' under Hedgerow Regulations 1997;
- ponds and streams of ecological value as semi-natural water features;
- several areas of Ancient Woodland;
- evidence of bat roosts;
- evidence of badgers living in the area;
- multiple sites identified as having Great Crested Newts present.

The Parish Council therefore asks that high importance is given in the Environment Statement to the potential impact another cable route and substation may have on the wildlife and ecology in the area. In particular the Parish

Council asks that special attention be given to preservation and retention of the ancient hedgerows and mature trees in the Parish.

Transport

Bolney has a varied class of roads within the Parish including the A23 dual carriage way, the A272 road running east/west through the Parish, ancient country lanes to the north of the A272 and narrow lanes to the south such as Bolney Chapel Road and Wineham Lane. None of these smaller lanes is suitable for construction vehicles as has been evidenced in the Rampion 1 construction programme.

The Parish Council therefore asks that special attention is given in the Environment Statement to the roads identified for possible access to any new substation construction site and that unsuitable, narrow rural roads in the Parish are avoided for the safety of residents and other road users.

Historic Environment

There are 18 Listed Properties in Bolney located within the Scoping Boundary and search area defined by the applicant. There are six Listed Properties in Bolney and Twineham within 600m of the Bolney National Grid and Rampion 1 substations.

Many of these Listed Properties are hundreds of years old and therefore suffer from poor soundproofing and are inadequately screened from nearby fields.

The Parish Council therefore asks that particular attention is given to the impact of any new substation on the setting of these Listed Properties and in particular on those properties that may be visible from a potential substation site.

Water Environment

During the Rampion 1 project, surface water contaminated with diesel was pumped from the substation site into local waterways without filtration or testing despite repeated emails having been sent to Rampion by local residents asking for assurances that the water discharged from the construction site was being filtered and monitored for contaminants.

The Parish Council therefore asks that better and more careful consideration is given in the Environment Statement to the management and discharge of surface water into local drainage ditches and waterways to avoid any future contamination for the benefit and protection of the wildlife and ecosystems in the Parish.

There has also been regular flooding from the Rampion 1 substation site onto neighbouring land that has obstructed a Public Right of Way on more than one occasion. The Parish Council therefore asks that extensive drainage plans are included in the Environment Statement to avoid potential flooding in the future, and to accommodate changes in weather patterns as a consequence of climate change.

Kind regards

Debbie Thomas
Clerk to Bolney Parish Council
Copper Beech, Malthouse Lane, Burgess Hill, RH15 9XA
Tel: 01444 230711
Email: clerk@bolney.com

Kent, Richard

From: Maria Seale <Maria.Seale@brighton-hove.gov.uk>
Sent: 29 July 2020 12:46
To: Rampion2
Cc: Liz Hobden; Nicola Hurley; Jane Moseley; Sandra Rogers; Chris Swain
Subject: EIA Scoping Consultation- Rampion2 offshore windfarm Ref EN010117-000006
Attachments: Letter to stat cons_Scoping Reg 11 Notification.doc_Rampion2 (003).pdf; BHCC response to EIA Scoping consultation Rampion2 windfarm 6-7-20.pdf

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11
Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion2 Offshore Wind Farm (the Proposed Development)
Ref EN010117-000006

I am writing further to your letter dated 6th July to the Head of Planning where you identified Brighton and Hove City Council as a consultation body that must be consulted before a Scoping Opinion is adopted regarding the above.

I attach the council's response which comprises comments received from various internal departments and consultees, and it is asked that these be incorporated when issuing your Scoping Opinion.

The council considers the current Scope to be insufficient and does not adequately address the likely significant effects of the proposed development.

The Environmental Statement needs to include assessment of the scheme from additional strategic viewpoints and further assessment of the impact to the settings of onshore heritage assets. Another key point that needs to be included in the ES is further assessment of the visual impact of the windfarm extension by itself, and cumulatively, and the resulting impact on tourism. Given the City's reliance on tourism and coastal activities, there is significant potential for socio-economic impacts which it is considered the Scope does not fully address. We would highlight the need for early engagement with the council to ensure potential socio-economic impacts on the tourism economy in particular are identified and mitigation agreed.

Please come back to me in the first instance if you have any further queries.

Regards,

Maria

Maria Seale | Planning Team Leader (Major Applications) | Development Management
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Brighton & Hove City Council Response to EIA Scoping consultation 6/7/20 – Rampion 2 offshore windfarm

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion2 Offshore Wind Farm (the Proposed Development)

Planning Inspectorate ref: EN010117-000006

Summary:

The council considers the current Scope to be insufficient and does not adequately address the likely significant effects of the proposed development.

The Environmental Statement needs to include assessment of the scheme from additional strategic viewpoints and further assessment of the impact to the settings of onshore heritage assets.

Another key point that needs to be included in the ES is further assessment of the visual impact of the windfarm extension by itself, and cumulatively, and the resulting impact on tourism. Given the City's reliance on tourism and coastal activities, there is significant potential for socio-economic impacts which it is considered the Scope does not fully address. We would highlight the need for early engagement with the council to ensure potential socio-economic impacts on the tourism economy in particular are identified and mitigation agreed.

Main Comment:

The council considers the following topic areas should be included within the EIA:

- **strategic views**
- **ecology, including potential impact to Living Coast Biosphere**
- **heritage**
- **coastal processes**
- **sustainability**
- **socio-economic impacts, including impact to tourism**

The council considers that the comments and topic areas identified by the consultees below should be considered and included within the EIA:

Comments from East Sussex County Council Landscape Architect:

The methodology for landscape and seascape assessment is thorough and sound and the proposed extent and area of study is agreed.

It is unclear from the documents whether the development would extend across the entire area identified by the red line which is very extensive. Neither do they indicate how many turbines at this stage. It is not clear how they will illustrate this in visual submissions and what they will actually be assessing in this context.

The assessment of impact on seascape/ landscape would need to consider the effects on local distinctiveness and sense of place within the various character areas.

The turbines would be 325m maximum height which is twice the height of Rampion 1 at 140m.

They have listed the key viewpoints to be assessed and whether these will be illustrative where they will produce either a wireline or rendered image of the development from these key views. Some from East Sussex and Brighton and Hove have been excluded from the assessment. It is recommended that some of these are reconsidered and others added as outlined below:

- Viewpoint 8: Brighton is upgraded from representative to illustrative because it is such a busy recreational area.
- Viewpoint 5: Newhaven Castle Hill coastguard lookout is upgraded from representative to illustrative because it is very sensitive.
- Viewpoint 4: Seaford Head Heritage Coast is upgraded from representative to illustrative because it is very sensitive.
- Viewpoint 16: Firlie Beacon is upgraded from representative to illustrative because it is very sensitive.

Viewpoints which have been excluded for various reasons and it is recommended they are assessed:

- Ditchling Beacon
- Hollingbury Golf Course
- Newhaven ferry or if not a key view from an area of the sea within the study area used for recreational boating such as sailing or fishing.

The zone of theoretical visibility diagrams indicate that there could be areas of the High Weald AONB and the low weald in East Sussex where the development would be seen. Although these are distant it would be helpful to have assessment from these viewpoints where the development may be seen.

Comments from the Planning Team Leader – Heritage & Projects:

With regard to section 5.13 on 'Seascape, landscape and visual', in terms of viewpoints, the comments of the County Landscape Architect are agreed with.

Brighton, Hove and Rottingdean are the closest coastal settlements to the scoped array area according to the Report, yet only two viewpoints from within the B&H area have been selected. The Report says (para. 5.13.92) that "it is also considered that there is also now familiarity with the visual effects of Rampion 1, such that people will be better able to visualise the effects of Rampion 2 based on fewer viewpoints". However, given that the proposed turbines would be more than twice the height of the Rampion 1 turbines I do not think that this is necessarily the case. I would certainly agree with the County Landscape Architect that a view from Hollingbury Golf Course, given its proximity to the scheduled monument, should be reinstated. I also consider that R1 viewpoint 11, from Marine Parade, should also be reinstated given its elevated position and wealth of designated heritage assets.

Section 6.9 of the Report on the Historic Environment only considers the impact of the onshore works on heritage assets within the onshore works boundary. There is therefore no methodical assessment of the potential impact of the offshore works on the settings of onshore heritage assets. Nor is this matter adequately covered in section 5.13 on Seascape, landscape and visual'. Therefore I do not consider the scope of the Report to be sufficient in this respect.

Comments from East Sussex County Council Ecologist:

The scoping report appears comprehensive for ecology and I agree with the factors that have been scoped in and out. A few minor comments follow.

- The location for storage of project components needs to be taken into account, and needs to avoid sensitive areas, e.g. Tide Mills LWS/coastal vegetated shingle adjacent to Newhaven Port and coastal vegetated shingle adjacent to Brighton Marina.
- Table 2.4 – key constraints. Biodiversity should include Local Wildlife Sites (LWS), although they are referenced later in the document. There is also a suite of marine Sites of Nature Conservation Importance (mSNCI) which should be considered.
- Table 5.7.1 Local records of marine mammals are available from the Sussex Biodiversity Record Centre.
- GCN surveys – district level licensing will be available in East Sussex and Brighton & Hove from late 2020 (timing of launch TBC), but not West Sussex.

Comments from the Sustainability Appraisal Officer (Planning Policy):

Both off and on-shore environmental and socio-economic aspects covered within the scoping seem quite comprehensive.

Study areas for each environmental/socio-economic aspect seem reasonable and scoping report builds in flexibility to allow changes to study areas arising from consultation.

Effects scoped out from further assessment seem to be justified, although specialists will be able to respond to this with greater certainty.

Methods for assessment seem to be in accordance with best practice, however again, specialists will be able to respond to this with greater certainty.

Comments from Sustainability Projects Officer:

The efficiency and generation capacity of the turbines increases dramatically with height, so the visual impact of the turbines should be weighed against the energy generation and carbon reduction from the scheme.

For context, it would be useful to have an estimate of the reduction in CO2 emissions due to the development.

Comments from the Planning Manager – Development Management:

A key point is the need to quantify the visual impact of the windfarm extension by itself, and cumulatively, and the resulting impact on tourism. Brighton & Hove is where the greatest number of people would be affected the most in the long term.

Given that the design envelope indicates that the offshore part of the proposal may extend east of its current location, the potential for negative landscape and visual impacts on areas within Brighton and Hove (B&H), and particularly cumulative visual impact along with the existing windfarm, is significant.

The viewpoints within Brighton & Hove identified in Figure 5.13.6 should be agreed with Landscape Officers before the SLVIA is carried out, noting that there appear to be only two

within the authority's boundary (numbers 7 (Beacon Hill, Rottingdean; and 9 – Brighton sea front promenade, adjacent to pier).

B&H is by far the most built-up, populous area on the coast, and heavily reliant on tourism, based on its seaside location (see paragraph 5.15.40 of the Scoping Request). It is also the closest coastal settlement to the windfarm, as noted at paragraph 5.13.88 of the report.

The potential landscape and visual impact of the windfarm expansion on the authority area, both during daytime and night time, therefore need to be considered in detail, and this must feed into considerations of the potential economic impact of the expansion on the tourism sector, as well as on local residents.

The cumulative impacts detailed in the SLVIA should, we consider, focus on Rampion 1 which is mentioned only in passing, but which has the potential to result in a much broader expanse of windfarm off the coast of B&H than is currently the case.

Given the City's reliance on tourism and coastal activities, there is significant potential for socio-economic impacts, both during construction and operation. Table 5.15.15 sets out 'embedded environmental measures', but many of these relate to the onshore elements of the proposal. We would highlight the need for early engagement with B&H to ensure potential socio-economic impacts on the tourism economy in particular are identified and mitigation agreed.

The in-combination impacts of landscape and visual impacts, along with socio-economic impacts, should be clearly set out.

Comments from the Seafront Manager:

I do not have significant concerns regarding impacts on the view from the seafront. However the areas listed below are in need of further consideration:

- Consultation with Brighton Marina,
- Consultation with local fishing industry
- Impact on potential for carbon storage in kelp forests?
- Consultation with CrossChannel Fibre project – planning to lay fibreoptic cable on sea bed from France to Brighton.

Comments from the Manager of the Madeira Terraces seafront regeneration project:

Strategic views:

The existing wind farm site is visible from the Eastern Seafront area and the Madeira Terrace site.

Moving to zero/low carbon energy seems necessary and inevitable. The restoration of Madeira Terrace will seek to work with natural capital available to the site, as such, a view of other sustainable forms of energy production i.e turbines on the horizon of the Eastern Seafront for cleaner energy generation could help to reinforce the sustainable energy generation being sought at MT.

Marine Life impact:

While working with University of Brighton lecturers on the MT30 project (first phase of restoration @ Madeira Terrace) concerns about the impact on marine life cause by vibrations from the turbines has been raised - there was a query whether any iron work not re-used or purposed in the MT restoration project could be used to form an underwater reef? So, is this impact and any potential solutions being considered in the screening opinion?

Maria Seale (City Planning) 29/7/20

Kent, Richard

From: Clymping PC <clympingpc@gmail.com>
Sent: 04 August 2020 13:02
To: Rampion2
Subject: Re: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Hello

Thank you for consulting us on the **Environmental Impact Assessment Scoping report**. This seems very full with most key priorities identified. However, from the perspective of Clymping Parish Council we feel the **scoping report should assess:**

1. the ongoing erosion and instability of the Clymping coastline. There were recent breaches of the sea defences resulting in flooding as far north as the A259.
2. the traffic impact on this traditional area of Clymping along the very narrow Climping Street or the unmetalled Bread Lane bridleway. Turning for large vehicles is very severely limited.

Val Knight

Clerk, Clymping Parish Council

On Monday, 6 July 2020, Rampion2 <Rampion2@planninginspectorate.gov.uk> wrote:

Dear Sir/Madam

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020 and is a statutory requirement that cannot be extended.

Karen Wilkinson

EIA and Land Rights Advisor

Major Casework Directorate

Direct Line: 0303 444 5072

Helpline: 0303 444 5000

Email: karen.wilkinson@planninginspectorate.gov.uk

Please note my working days are Monday, Thursday and Friday.

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DPC:76616c646f72



ECONOMY AND PLANNING SERVICES



Contact: Mrs J. McPherson
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Direct Fax: (01293) 438495

Our Ref: CR/2020/3001/EIA
Email: development.control@crawley.gov.uk
Date: 10 July 2020

The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN
FAO Richard Kent

Dear Sir

TOWN AND COUNTRY PLANNING ACTS

LOCATION: RAMPION 2 OFF SHORE WIND FARM

PROPOSAL: REQUEST FROM THE PLANNING INSPECTORATE TO CRAWLEY BOROUGH COUNCIL (AS A CONSULTATION BODY) FOR ANY COMMENTS TO INFORM THE ENVIRONMENTAL IMPACT ASSESSMENT SCOPING OPINION FOR RAMPION 2 OFFSHORE WIND FARM

Thank you for your consultation seeking the advice of Crawley Borough Council (CBC) on the Environmental Impact Assessment Scoping Report by Rampion Extension Development Limited in relation to Rampion 2 Off Shore Wind Farm.

While CBC is a consultation body due to some of the proposed development taking place in the adjoining local authorities of Horsham district and Mid Sussex district whose administrative boundaries adjoin the south of the borough, this authority has no specific comments to make on the Scoping Report provided.

If you have any queries please contact Mrs J. McPherson by phone or email.

Yours faithfully



Jean McPherson
Group Manager Development Mangement



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BS1 6PN

Our ref: HA/2020/122383/01-L01

Your ref: EN010117-000006

Date: 04 August 2020

Dear Sir/Madam

RAMPION 2 OFFSHORE WINDFARM SCOPING NOTIFICATION AND CONSULTATION

RAMPION, SUSSEX COAST

Thank you for consulting the Environment Agency on the Scoping Opinion which we received on 6th July 2020.

Environment Agency Position

We have reviewed the *Rampion 2 Offshore Wind Farm - Environmental Impact Assessment - Scoping Report* – dated July 2020 as submitted.

We have not had the opportunity to review any of the submitted information prior to this consultation. We would welcome some further engagement on some of the potential issues covered in our response.

Marine Water Quality and Water Framework Directive

We note that only very little consideration has been given to any potential effects of the proposed development on marine water quality.

The impacts on water quality from increases in suspended sediment concentrations will

need to be considered, in particular those related to re-suspension of contaminated sediments near the designated Bathing Waters. Potential effects should be assessed during construction and maintenance.

A Water Framework Directive (WFD) Assessment will be required for this development. We recommend including this as a standalone chapter in the report.

The WFD assessment should include any potential impacts of the works on marine water and sediment quality, particularly with regard to the two designated Bathing Waters (Middleton-on-Sea, Littlehampton) in proximity of the proposed cable corridor and landfall site. Elements of the proposed works will result in the mobilisation of sediments and associated contaminants, which may include faecal bacteria. This presents an increased risk to bathing water quality during the bathing water season (May-September). While we acknowledge that impacts on water quality from increases in suspended sediment concentrations will be temporary, even a small and temporary increase in background faecal bacterial load has the potential to impact on bathing water compliance at a designated bathing water.

Hence, we advise the applicant to assess even short-term effects of as part of the WFD assessment. This will be particularly relevant in the context of any activities that may give rise to increased suspended sediment concentrations in proximity to sensitive areas. Suitable evidence of no likely impact will be required for any marine works.

The WFD assessment should follow the 'Clearing the Waters for All' guidance, which has been published on <https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters>.

A WFD Assessment should comprise either:

- an explanation of why the activity has been screened out; or
- an explanation of why all elements have been scoped out, ideally using the scoping template; or
- an impact assessment.

The size and scale of the WFD Assessment should be proportional to the risk posed by the potential works, but the applicant must demonstrate that they have assessed the risks and provided mitigation where necessary.

For water quality specifically applicants should assess impacts for activities that potentially increase suspended sediment concentrations in proximity to Bathing Waters and Shellfish Waters, including short-term effects. In order to assess the risks, an estimate of the volume of sediment disturbed during the activity is required. Sediment sampling might be required if the volume of disturbed sediment is significant, or where heavy contamination is expected. Where risks to water quality are identified, measures have to be taken to avoid or mitigate potential impacts.

Examples of Mitigation:

- Minimise sediment disturbance
- Consider the timing of works:
 - 1) Work around low water to avoid stirring up any sediment into the water column
 - 2) Plan activities to occur outside the Bathing Water season
- Consider methodology: choice of dredging plant or construction method etc.
 - 1) Land-based or marine plant
 - 2) Choice of dredger: e.g. Backhoe dredging is less likely to increase suspended sediment concentrations than Water Injection Dredging
 - 3) Use of temporary bunds or silt curtains

The chemical water quality risk posed by disturbing a volume of sediment will always depend on the pre-existing water quality, the levels of contaminant present in the sediment being disturbed and the potential for dilution within the receiving waterbody. As waterbodies vary considerably in size, a significant volume for a small waterbody might be insignificant in a larger one. In estuaries, tidal state and freshwater flow in the context of available dilution may vary considerably, and the choice of timing of the works will be important.

Ecology

We welcome the suggested format for Environmental Statement and Commitments Register. Whilst there is a large quantity of survey data already available these documents should also be mindful of any new sources of data and include updated surveys already completed or proposed during the period prior to construction.

With regards to offshore impacts, our remit includes migratory species relevant to the development Zone Of Influence including Sea Trout, Eels, & Sea lamprey which all use the River Arun as a migration route. It must be shown the activities will not have a direct or indirect impact on movement of these species that might delay or prevent their entry to freshwater at critical times.

The onshore construction is likely to cross several watercourses that have WFD status, including the main river Arun. Therefore it will be necessary to demonstrate how this development could contribute to the delivery of WFD actions on these impacted waterbodies.

It is recommended that existing nature conservation features, within the proposed development route, such as mature trees, hedgerows, watercourses and other features, be incorporated into site design and protected from change. Enhancement opportunities that help retain or provide ecological corridors for wildlife should be explored and considered.

Ecological enhancements are improvements over and above impact avoidance and mitigation. In line with current legislation, a target of net gain for biodiversity should be sought and this needs to be reflected in the Environmental Statement.

The inclusion of any mitigation will also require a suitable scheme for monitoring to be in

place that assesses how effective these measures have been in the longer term, along with future site management/maintenance proposals for any created habitat.

Groundwater Quality

Of particular note we would expect to see the impacts of any intrusive works or Horizontal Directional Drilling through any sensitive locations such as Source Protection Zones and Principal Aquifers adequately assessed in the Environmental Statement. The proposed onshore route from the landfall site at Climping through to Bolney may go through the SPZ for the public drinking supply at Hardham which would need to be addressed for impacts.

Groundwater Source Protection Zones (“SPZs”) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. Designated to protect individual groundwater sources, these zones show the risk of contamination from any activities that might cause pollution in the area. In this context they are used to inform pollution prevention measures in area which are at a higher risk, and to monitor the activities of potential polluting activities nearby.

We would also expect to see the impacts and possibility of creating pathways for contaminants assessed adequately within the Environmental Statement including how these will be managed and monitored through the pollution prevention precautions.

If the cable route passes through areas of contamination, it may create a preferential pathway for contamination to migrate. Any risk assessment for the areas of known/suspected contamination, specifically historic landfills, must also consider the potential for leachate from the waste mass and the disturbance of any site engineering or containment systems, if applicable. We would welcome site specific discussions in this respect.

Dewatering

During construction if any de-watering activities (from land or from excavations) must comply with the Environment Agency’s Position Statement on Dewatering Temporary Excavations <https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water> if this can't be achieved then the applicant will need to apply for a discharge permit and potentially an abstraction licence as well. This should be recognised in the Environmental Statement.

Flood Risk Assessments

The boundary for the proposal are currently shown to be within areas of Flood Zones 3 and 2, both tidal and fluvial. We would have particular interest to the proposed works within fluvial areas, particularly where subsoil and topsoil storage is required, both temporary and permanent. We would require a flood risk assessment at the detailed application stage.

Flooding

Based on the application area, the applicant should be aware that the coastal frontage at Climping was severely damaged and overtopped in January and February 2020, and widespread flooding occurred inland as far as the A259 and beyond. The Environment Agency have since constructed a large shingle embankment, which at the time of writing has held up well, when subjected to further high tides.

However, this is not seen as long term option. The Environment Agency is reviewing future options for the beach management of this frontage.

As part of the Environment Agency's internal projects, it should be borne in mind that proposals are being considered for removal of riverbanks so as to form inter tidal habitats, particularly in the area of the Adur valley. These areas may be within the route of the proposed cabling.

A major flood defence scheme has just been completed in the town of Arundel. These areas may be within the route of the proposed cabling.

Historic flood issues have affected the communities of Storrington, Steyning and Bramber. These areas may be within the route of the proposed cabling.

Permits

For the previous Rampion 1 works (Brooklands to Bolney) works which impact 'main river', 'internal drainage board ditches' and 'ordinary watercourses', Flood defence consents would have been dealt with entirely by the EA.

Whilst the EA will still deal with works to main rivers and the River Arun Internal Drainage Board ditches (the River Adur Internal Drainage Board has since been dissolved), Flood Defence Consents have now been superseded by Flood Risk Activity Permits (FRAPs) and are now subject to a completely different charging mechanism. This also includes the coastal frontage at Climping which would be subject to a FRAP application.

We would welcome a meeting with the applicant once the cabling route has been firmly established, so as all issues can be identified at the earliest stage.

As part of the Environment Agency FRAP process opportunities for Water Framework Directive improvements would be sought.

All other watercourses within the area which are known as 'ordinary watercourses' will require consent approval from the Lead Local Flood Authority (LLFA), West Sussex County Council.

Works which are on the coastal frontages, and tidal watercourses e.g. River Arun and River Adur in addition to a FRAP, a Marine Management Licence (MMO) will most likely be needed.

The Environment Agency will have a presumption against open cut crossing of watercourses, and would always lean towards cabling being directionally drilled below bed level. Particular permitting concerns at this initial stage in addition to cable crossings would involve temporary works which include dewatering, and as stated earlier any spoil heaps in the flood plain both temporary and permanent, which could result in the need for flood storage compensation.

Works timings and ecological safeguarding would also be considerations as part of any FRAP application.

Further Advice

If the applicant would like any further detailed advice in connection with development we can offer our planning advice service.

As part of this cost recovered service, we provide a dedicated project manager to coordinate bespoke advice from the relevant technical experts at the Environment Agency, e.g. on reports, plans or other evidence in support of the application.

This will provide greater confidence in our position on the development, and create space for dialogue, prior to continuing the more formal nature of the planning application process.

If you would like more information on the service, including a cost estimate, please contact us at planningssd@environment-agency.gov.uk

Should you have any further queries please do not hesitate to contact me.

Yours faithfully

Mrs Sophie Brown
Sustainable Places Planning Advisor

Direct dial 02030 257250

Direct e-mail planningSSD@environment-agency.gov.uk

Mr R Kent
Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our Ref: GENE/20/00500
Direct Line: (023) 01730 234223
Ask For: Ms L Wells
Email: planning.development@havant.gov.uk

03 August 2020

Site Location: West Sussex Coast - 13-25Km offshore between Selsey and Brighton
Re: Non Statutory Consultation for Application by Rampion Extension Development Limited (the Applicant) for an Order Granting Development Consent for the Rampion 2 Offshore Wind Farm (the Proposed Development) - Scoping Opinion

Dear Mr Kent

I am writing to you further to your non-statutory consultation received on the 06 July 2020 regarding the above address.

Based on the information provided, the Council's Landscape Architect has advised that from a landscape perspective there are no adverse comments in relation to this consultation. As yet, I have received no response from the Council's Coastal Engineering or Engineering/Drainage Teams. Once received, I will forward them on to you.

As to the routing of the cabling for this Offshore Wind Farm, the information provided suggests that it will not be going through the Borough of Havant. On this basis, no comments are raised on this point. If this assumption is incorrect, would you please advise accordingly and provide a plan(s) on routing details for the cabling.

Please note that the above comments are the opinion of individual Planning Officers and are in no way binding upon the Council when determining any future matter.

Yours sincerely

Ms L Wells
Shared Planning Compliance Manager
Our Ref: GEN/20/00500

Kent, Richard

From: Claire Tester <Claire.Tester@highweald.org>
Sent: 04 August 2020 13:10
To: Rampion2
Subject: Rampion2 Offshore Wind Farm Scoping Proposal

Thank you for consulting the High Weald AONB Unit on this scoping proposal.

Please can the [High Weald AONB Management Plan 2019-2024](#) be added to the data sources in Table 6.2.2.

Regards,

Claire Tester MRTPI
Planning Advisor, High Weald AONB Unit
Woodland Enterprise Centre, Hastings Road, Flimwell, Sussex, TN5 7PR
01424 723018 www.highweald.org

Advising on the management of a nationally important landscape, part of our Natural Health Service

Please note that I am currently working from home due to the Covid-19 situation. The office is closed so telephone calls will not be picked up directly but if you leave a voicemail I can access it remotely. Otherwise please contact me by email or see general advice on our website at www.highweald.org/look-after/planning.html

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Kent, Richard

From: Franklin, Richard <Richard.Franklin@highwaysengland.co.uk>
Sent: 04 August 2020 13:31
To: Rampion2; Eleri.wilce@rwe.com
Cc: A27 Arundel Bypass; Planning SE; Bown, Kevin; Bowie, David; Cleaver, Elizabeth
Subject: Highways England Response (HE ref. #10658): EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Consultation: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Highways England Ref: #10658

Dear Mr Kent and Mr Wilce,

Thank you for your consultation dated 6th July 2020 on the above EIA scoping request for the proposed development of Rampion 2 Offshore Windfarm.

Highways England has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 (SRN). The SRN is a critical national asset and as such Highways England work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long term operation and integrity. In the case of this proposed development, Highways England is interested in the potential impact that the development might have on the A27 and A23 trunk roads. We are interested as to whether there would be any adverse safety implications, or material increase in queues and delays on the strategic road network as a result of the development.

EIA Scoping

In terms of the EIA scope, our concerns are confined to an assessment of the potential impacts on the SRN during either construction or operation of the site in the longer term, and are therefore related to the following:

- traffic generated;
- the proposed development's location in the vicinity of the A27 and A23; and
- any mitigation that might be required on the SRN/Highways England assets that itself may have environmental implications that must be fully mitigated by the development (e.g. directional drilling where the onshore cable crosses the A27, any Temporary Traffic Management, any drainage and flood prevention measures, etc.)

Having reviewed Chapter 6.7 on Transport in particular, we have the following comments:

- Generally we are content that the EIA scope covers the main elements of an EIA including the context and baseline traffic conditions, significant effects (construction and operational), proposed methodology (baseline, assessment, receptor sensitivity, magnitude of change, effect significance).
- In addition to the EIA Regulations 2017 and other guidance, reference should be made to the new DMRB section LA 101 - 20 for Sustainability and Environment which includes Environmental Impact Assessments.
- The EIA should contain information on all transport related effects including noise and air quality, particularly as a Transport Assessment is not proposed given that the peak hour traffic flow associated with Rampion 2 is very low.

- We note the requirement for baseline traffic surveys to inform the EIA and the difficulties with conducting these this year with the Covid-19 pandemic. Please note any surveys on the A27 or A23 will require permission from Highways England.
 - Information regarding the extent of any Temporary Traffic Management and road closures may also be required. The following details will be required in order to assess the likely impact of temporary diversions:
 - Type of temporary traffic management, road closures and diversions;
 - Night time and or otherwise;
 - Dates (time of year); and
 - Duration.
 - Construction vehicle and site operation details will also be needed including:
 - Delivery Route(s) to site (expected to be on the strategic highway network);
 - Number and type of vehicles (including abnormal loads) per day and by phase of construction;
 - Hours of operation; and
 - Other site management, wheel wash facilities, etc.
 - Depending on the information provided on the extent and effect of temporary traffic management and resulting diversions, availability of the following will assist in the assessment of the impact of traffic diversion routes further afield:
 - Strategic traffic model for the area if available; and / or
 - Available traffic information on the traffic diversion routes.
- If the extent of the road closures required is more significant, this data will be reviewed, and additional surveys may be required.

Construction Management Plan

Given the above, it is key that the applicant works with Highways England in devising a Construction Management Plan, and that we are consulted on it accordingly. In particular, a key area of concern is method of construction where the onshore cable would cross the A27 near Arundel in respect of:

- Methodology for installing the onshore cable where it crosses the A27 (it is expected that the methodology for this would minimise disruption to the A27, such as using directional drilling under the A27);
- Potential conflict with the A27 Arundel Bypass scheme (see below); and
- Impact on Highways England's assets (such as drainage).

A27 Arundel Bypass

We note that the proposed onshore cable route would cross the A27 just to the east of Arundel and the applicant indicates awareness of the proposed Arundel Bypass scheme. However, Highways England wishes to highlight the potential conflict between the two schemes. As it stands, the A27 Arundel Bypass timetable is as follows:

- Present - Highways England is currently considering consultation responses on potential routes following consultations in 2019 and early 2020
- 2020 - New preferred route announcement
- 2020 - Public consultation on the preferred route
- 2021 - Submit application for a Development Consent Order under the Planning Act 2008
- 2022-2023 - Subject to approval, start construction

Given that the Rampion 2 DCO application is expected to be submitted to the Planning Inspectorate in Q3 2021, both are due for submission around the same time, and with the Rampion 2 construction due to take place over 5 years with start date TBC, both applications have implications for each other that each will need to be taken into account. We note that the applicant proposes to consult Highways England as part of the Evidence Plan process, and in light of the

above, we would encourage that this is undertaken as soon as possible (via our Spatial Planning Team and A27 Arundel Bypass email addresses, which are planningse@highwaysengland.co.uk and a27arundelbypass@highwaysengland.co.uk respectively).

If you have any queries regarding this response, please contact us at: planningse@highwaysengland.co.uk.

Regards,
Sent on behalf of Kevin Bown, Spatial Planning Manager Area 4

Richard Franklin
Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ
Web: <http://www.highways.gov.uk>

Please note that for the foreseeable future we are all working from home. All meetings will be via telephone, Skype or similar. We will continue to seek to work to our statutory and other deadlines. In case of IT or other issues, as a precaution, please copy all emails to PlanningSE@highwaysengland.co.uk . Thank you.

From: Rampion2 [<mailto:Rampion2@planninginspectorate.gov.uk>]
Sent: 06 July 2020 11:57
Subject: #10658 EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Dear Sir/Madam

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020 and is a statutory requirement that cannot be extended.

Karen Wilkinson
EIA and Land Rights Advisor
Major Casework Directorate
Direct Line: 0303 444 5072
Helpline: 0303 444 5000
Email: karen.wilkinson@planninginspectorate.gov.uk

Please note my working days are Monday, Thursday and Friday.

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

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Richard Kent
The Planning Inspectorate
Temple Quay House
2 The Square
Bristol,
BS1 6PN

Direct Dial: 0207 973 3630

Your Ref: EN010117-000006
Our Ref: AH32

4th August 2020

Dear Mr Kent

RAMPION 2 OFFSHORE WINDFARM

Thank you for letter dated 6th July 2020 requesting our comments on the Scoping Report for the above development. Our comments are laid out in the letter below.

General comments

1. The Project

The proposed onshore infrastructure will comprise a landfall site within the vicinity of Climping, a buried (underground) export cable (approx. 36km in length), and a substation in the vicinity of Bolney.

The offshore elements will consist of up to 116 wind turbine generators, wind turbine foundations, up to 3 substations and associated foundations, inter-array cables, and export cables in an area of search of approximately 74km² in order to connect the wind farm array area (approximately 315km²) to the landfall.

2. Impact

The proposals have high potential to impact upon both designated and undesignated heritage assets and their settings, in both an onshore and offshore context.

There are significant number of designated heritage assets and Archaeological Notification Areas (ANA) that fall within the scoping area. It will be essential that in the Environmental Statement (ES) the full range of heritage assets are identified that may be affected by the scheme.

We would expect an assessment to clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected have been included and can be properly assessed. An



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arbitrary radial search may not accurately reflect the impact of the development on heritage assets in the wider area, and a more tailored approach that takes into account geology and topography would be required.

In line with the advice in the National Planning Policy Framework (NPPF) and Marine Policy Statement (MPS), we would expect a Scoping Report and subsequent ES, to contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets. These effects might originate from construction, operation and decommissioning of the proposed scheme.

The assessment should also therefore take account of the potential impacts which associated development activities (such as construction, servicing, maintenance, and associated traffic) might have upon perceptions, understanding, and appreciation of heritage assets.

The assessment should also consider the likelihood of alterations to drainage, ground water, and scour/tidal flow patterns that might lead to in situ decomposition or destruction of below ground or marine archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

3. Recommended approach

On such a large project, an integrated approach to assessment is required that demonstrates an understanding of how all the individual elements of the historic environment come to together to form a 'special place', and which fully analyses how the development proposals may impact upon the uniqueness of the area, and the heritage assets within it.

We think it essential therefore that an integrated *landscape approach* to assessment of heritage assets (both designated and undesignated) is undertaken and translated into the report.

Geoarchaeology will be a key issue for this project, both onshore and offshore. Landscape characterisation would help predict previous land use, combining geology and archaeology to identify where people might have lived and their contemporary environment, and providing evidence to feed into an overarching deposit model.

4. Designated heritage assets

We recommend close collaboration of cultural heritage and landscape/visual impact assessment, in order to adequately address issues in relation to setting of designated heritage assets.

Techniques such as photomontages and computer generated views analysis imagery



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are a useful part of understanding visual impacts. Analysis of the views from within the site boundaries, out of, and across the key site areas in relation to designated sites will be important.

Setting may also form a part of the wider conceptual significance of a heritage asset and how it is experienced, and the report must therefore additionally reflect these more nuanced aspects of setting in order to fully take account of impact.

Further guidance on setting can be found at our website:

(<https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/>). Version 4 of this document is currently under review.

There will be a requirement through planning policy to avoid harm to designated heritage assets, but by following planning policy and guidance we would also expect the project to be creative in how it might offer opportunities for their enhancement and public (heritage) benefit.

5. Non-designated heritage assets

We would expect the ES to consider the potential impacts on non-designated features of historic, architectural, archaeological or artistic interest.

This is because these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This information is available via the local authority Historic Environment Records (www.heritagegateway.org.uk) and relevant local authority staff, and the National Record of the Historic Environment (NRHE) for offshore assets. Though we note the current difficulties in accessing the NRHE, it is important that this data is included within the EIA.

We strongly recommend that conservation and archaeological staff at the relevant County and Local Councils are involved at an early stage.

They are well placed to advise on: local historic environment issues and priorities; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets. They will also be able discuss how a proposed scheme could further enhance the historic environment.

The County Archaeological Officer will be a key consultee regarding impacts to undesignated heritage assets. It would be advantageous if Historic England could be consulted in parallel for onshore and intertidal zone matters, as that would minimise any conflicting advice and allow us to consider designated and non-designated heritage issues together.



Specific comments on the Scoping Report

Marine Archaeology

Glossary: The Historic Seascape Characterisation (HSC) and the Marine Policy Statement should be included here.

Chapter 2: Reference is made to the utilisation of seabed preparation techniques for the installation of the Wind Turbine Generator (WTG) foundations and inter-array cables, but not in relation to the substation foundations or export cables. It should be clarified whether seabed preparation may be required for these elements of the project.

Subsection 5.14: We accept the methodology for the desk-based assessment, and acknowledge the delay in accessing the NRHE. The desk-based sources references in this section (paragraph 5.14.9 and Table 5.14.4) are suitable, but it would be useful to also include data from:

- The British Marine Aggregate Producers Association (BMAPA) finds protocol;
- The Offshore Renewables Protocol for Archaeological Discoveries;
- Portable Antiquity Scheme data/Maritime Antiquity Scheme.

Table 5.14.1: Aircraft crash sites that would be designated under the Protection of Military Remains Act 1986, should also be included in the High/Very High category.

Geophysical survey: We note that a 100% coverage geophysical survey is planned for June/July 2020 to help inform the archaeological assessment with the EIA. In the absence of a WSI, it would be advisable to produce a method statement for the assessment of this data.

Paragraph 5.14.11: The list of guidance documents presented could be usefully expanded to make reference to the South Marine Plan heritage policy S-HER-1, and to include:

- Historic England Deposit Modelling and Archaeology Guidance for Mapping Buried Deposits (2020);
- Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition; 2011);
- Geoarchaeology: Using earth sciences to understand the archaeological record (2015).

Table 5.14.7: We acknowledge the list of Commitments presented (Relevant marine archaeology embedded environmental measures), and are content that the overall direction of the commitments are appropriate. Subject to further information being



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present with the ES, Preliminary Environmental Information Report (PEIR) and EIA, we may wish to suggest amendments and additions over the course of the pre-application consultation and examination process, to ensure that the commitments reflect the most up-to-date information and best practice.

Table 5.14.7 does not make it clear that geoarchaeology/archaeology requirements should help steer the geotechnical interventions, and will influence the locations and sampling requirements. The geotechnical survey should be designed to address geoarchaeological and geotechnical requirements. The geoarchaeologist should not only review the data, but examine samples and sub-samples for palaeoenvironmental remains and dating (see 'Geoarchaeological Advice' below).

Table 5.14.8: The 'Likely significant marine archaeology effects' presents the current impact assessment for impacts on archaeological receptors. We acknowledge that the majority of the impacts, with the exception of those relating to scour and draw-down impacts, have been scoped out of a detailed or simple assessment.

It is our understanding that this scoping out is hinged on the 'Commitments'; the assessment of data to determine the known and unknown potential for archaeological receptors will be undertaken, and known receptors avoided. Whilst we wish to raise no objection to this approach at this stage, we caveat that this is subject to the appropriate wording of the Commitments, and securing these within the Development Consent Order, Deemed Marine Licences, and the Outline Offshore Written Scheme of Investigation (WSI).

Paragraph 5.14.44: Additionally, it would be useful if this paragraph was modified to reflect the geoarchaeological input to the design of the geotechnical survey, and the need for sample examination (rather than simply reviewing the results), as outlined in the comments above on Table 5.14.7.

Subsection 5.13: In order to inform the landscape, seascape and visual effect assessment detailed here, it would be useful to refer to the relevant Historic England HSC assessments as data sources.

Historic Environment

Table 2.4: Aircraft crash sites that would be designated under the Protection of Military Remains Act 1986 should also be included in the High/Very High category.

Table 6.9.1: Non-designated remains of national importance should also be included in the High category.

6.9.2: It may be necessary to consider a broader range of interceptors. For example; air quality and transport (considering how fumes and increased vehicle movements might impact the appreciation of heritage assets), and water environment (drainage



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and ground water changes in relation to heritage assets). We also include advice on this aspect in 'general comments' section 2 of this letter.

Paragraphs 2.4.20, 6.9.37 and 6.9.38: Palaeolithic remains and deposits, as well as elements of a Bronze Age rural landscape, have been exposed by coastal erosion close to the landfall site at Climping and elsewhere on the Sussex Coastal Plain, and such evidence is not focused on the Chalk Downs as these paragraphs suggest.

This area therefore has high archaeological potential (with the possibility for discovery of remains of national importance). We are not clear therefore how undesignated archaeological remains have been taken into consideration as part of the selection process for the landfall area (and onshore route).

Table 6.9.4, Key sources of historic environment data: The sources used to identify protected military remains sites should be included here.

Table 6.9.5, Embedded environmental measures, C-6: The full range of designated heritage assets should be included here, not just listed buildings and scheduled monuments.

Table 6.9.6, Likely significant historic environment effects, C-6: Potential effect from permanent loss on non-designated heritage assets has been included, but not designated heritage assets. Whilst it should be a key aim of the project to avoid direct physical harm to designated heritage assets, this should still be scoped in for the relevant construction phases.

6.9.57 Cumulative effects: Physical impacts could also be possible in relation to historic buildings, above ground historic structures, and historic/archaeological earthworks, in addition to buried archaeological remains (but noting the requirement to avoid harm to designated heritage assets).

Geoarchaeological advice

Off-shore scheme

1. Impact

This is a large project located in an area of archaeologically sensitive buried palaeochannels and therefore has the potential to cause a high level of harm.

It will be important therefore that appropriate information is collected to understand the archaeological resource so that harm may be avoided. This means that mechanisms must be put in place to make sure geoarchaeological input to any geophysical and geotechnical surveys is proactive and does not simply react to datasets, samples and information passed on from other workstreams.



2. Recommended approach

Constructing an overarching framework will be vital to the research outcome of the project. This should have objectives that will be addressed (and refined) by a staged geoarchaeological approach, with each component building on the last.

Geoarchaeology will be a major component of the project, with a continuous thread through both on-and off-shore work. Appointing a geoarchaeologist to have oversight of the project and synthesise both elements would therefore be extremely beneficial.

Geoarchaeological review of the geophysical surveys proposed for this summer, together with review of the previous (Rampion 1 and Gupta's Arun Valley work and other available information) should give some idea of the pattern or likely extent of buried palaeofeatures within the Rampion 2 study area.

Based on this, we would expect to see in the PEIR/ES/EIA/WSI documents a clear set of overarching research objectives and supporting strategies for addressing them.

A staged approach is needed, not only in the post-ex work on the samples obtained, but from the outset to ensure a proactive approach to the geotechnical and geophysical survey. Identifying palaeofeatures should be an objective of the geophysical survey and these should be the focus of subsequent geoarchaeological investigation, with research questions developing as more information is obtained.

3. Role of a geoarchaeologist

The project archaeologist/geoarchaeologist should work with the contractors planning the geophysical and geotechnical investigation. This would ensure some boreholes and transect lines are located with the aim of building up a better understanding of the character, date and archaeological significance of the channel system (or/and other features identified).

The geoarchaeologist should ensure the collection of information from specific locations to form datasets that will build-up an understanding of the archaeological resource. The intention for this approach must be made clear from the earliest documentation, irrespective of what survey work has yet been possible. This will enable appropriate mechanisms to be put in place and methodologies agreed as the project moves forward.

We also highlight the importance of submitting method statements to Historic England for geophysical and geotechnical surveys. This will enable us to have a greater degree of input into the design of surveys and the assessment of data, and allow for clear expectations to be formalised between all parties. This is especially important for the geoarchaeological side of the project and should be inclusive of collection, retention, access and storage for geotechnical core samples, as well as the staged analysis.



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It is also important that geoarchaeological access is afforded to the core samples extracted, for logging, detailed description, and sampling; and the standard staged approach to scientific dating, palaeoenvironmental assessment, deposit modelling and subsequent analysis is undertaken.

On Rampion 1, gas blanking (potentially because of peat deposits) was a problem for construction and led to requested boreholes for geoarchaeological purposes not being taken as part of mitigation (as these areas were avoided for construction). Hopefully with adequate geoarchaeological input from the outset, similar issues will not occur on Rampion 2, as suitable samples will be taken during earlier rounds of geotechnical survey and their location and potential for further analysis clearly recorded and understood.

4. Reporting

We would expect to see mechanisms in place to ensure all samples and sub-samples taken for geoarchaeological purposes are clearly identified in an ongoing register, to include their location; and that appropriate storage facilities are available for the duration of the project.

It would also be very useful if each report produced, clearly set out in a grid its genesis and hierarchy, so it was absolutely clear how each piece of work fitted into the overarching scheme of archaeological/geoarchaeological investigation. Lack of communication and uncertainty about what had been done, by whom and when, as well as what material was still available, were issues that led to a very muddled Rampion 1 paper trail.

On-shore scheme

1. Impact

The proposed area of landfall is Climping Beach, where huge erosion has been ongoing recently, resulting in an increasing body of evidence for the medieval, Palaeolithic and Bronze Age periods. The potential for harm to these deposits is therefore high.

As part of the desk studies identified, it would be useful to look at topography and geology (especially superficial geology) as well as historic borehole information for the route corridor, to understand the different characteristics and likely depth of deposits of archaeological interest likely to be encountered along the route.

It is possible that archaeological remains will lie within deep alluvial and colluvial sequences in parts of the route. There is also potential for Pleistocene deposits and Palaeolithic remains associated with the raised beaches of the Sussex Coastal Plain.



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These remains might be impacted by the scheme but will not be detected by shallow magnetometer survey or evaluation trenching.

2. Recommended approach

In order to make a robust assessment of archaeological potential a staged approach is needed to assessment and fieldwork:

- Provisional deposit model;
- Magnetometer survey;
- Test pits and boreholes for potentially deep sequences, where Holocene archaeology could lie within alluvium or colluvium and Palaeolithic evidence in Pleistocene deposits;
- Evaluation trenching, where appropriate;
- Review of deposit model throughout process.

Rather than start with a magnetometer survey, a more useful approach would be to begin with an outline deposit model (in this case a linear section/transect dividing the route corridor into zones of different character and resulting archaeological potential), using any available information. This would include geology and topography mapping, historic/existing boreholes and archaeological records identifying the deposit sequence, as well as information from any geotechnical work being done for the scheme, which could be monitored by a geoarchaeologist.

The preliminary deposit model (as well as aerial photos and Lidar) should identify areas where archaeology could lie at shallow depth and magnetometer survey would be useful.

The deposit model would also highlight areas where archaeology could lie at depth within the natural deposit sequence and test pits and/or boreholes would be needed to understand archaeological potential. Based on the above results a less extensive and more targeted programme of evaluation trenching could be designed.

Given potential access constraints, starting off with a deposit model also makes good sense in the short timeframe available and would enable an overview of the whole route, rather than snippets of information from areas where access is possible.

Recommendation

This is a complex project proposal in an area of high historic environment significance.

The scheme has the potential to impact both designated and undesignated heritage assets of national importance, in a marine and terrestrial context.



Historic England

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We consider the effects on the historic environment are likely to be high and in need of detailed consideration through the EIA process. We would therefore expect to see the development proposals and supporting documentation actively respond to historic environment concerns.

We think there must be a particular focus on using landscape approaches to analysis that relate to topography and geology, which incorporate robust geoarchaeological methodologies, and demonstrate a range of methods of study and analysis.

Inclusion of the full range of potential impacts on designated heritage assets within the forthcoming Environmental Statement will be essential.

Please contact us if you require further advice in relation to these comments.

Yours sincerely



Rebecca Lambert
Inspector of Ancient Monuments
E-mail: rebecca.lambert@HistoricEngland.org.uk



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Richard Kent
Senior EIA Advisor
On behalf of the Secretary of State

Our ref: EIA/20/0003
Your ref: EN010117-000006
Please ask for: Matthew Porter
Email: Matthew.porter@horsham.gov.uk
Contact Tel: 01403 215561
Date: 29th July 2020

Dear Mr Kent,

Scoping consultation

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion 2 Offshore Wind Farm (the Proposed Development)

Thank you for your request of 6 July 2020 for Horsham District Council (HDC) to inform the Planning Inspectorate of the information considered should be provided in the Environmental Statement (ES) relating to the Proposed Development.

The Rampion 2 Scoping Report Doc Ref. 42285 dated July 2020 has been reviewed.

The HDC response focuses on high level, strategic topic areas at this stage. The topic areas covered do not reflect the full remit of those addressed in the Environmental Impact Assessment (EIA) but highlight what are considered by the Council to be the key issues within its remit.

Because the Council's remit ends at low water mark, impacts beyond that point have not been addressed, other than where they have onshore impacts. Each of the topics has been considered in relation to the four elements of the development (offshore, landing, onshore, and substation).

Description

Introduction

The onshore elements of Rampion 2 relate to the onshore electricity grid connection from the point of MHWS to connection with the National Grid transmission system. This will comprise the following key components:

- transmission cables defined in a cable corridor of approximately 36km in length; and
- a new substation that will connect to National Grid's substation at Bolney, for which there are currently a number of options under consideration.

Recognising existing constraints and sensitivities around the existing Bolney Substation, a number of candidate 'satellite' sites (within a radius of 5km and lying within the boundary set out in this Scoping Report) are being considered for where the new wind farm substation would be located. Regardless of final site selection, the electricity ultimately needs to be fed into the existing National Grid Bolney substation, which would require underground cables and minor upgrades at Bolney Substation.

Onshore Cable Corridor

The onshore grid connection for Rampion 2 will be made via a buried cable along the entire length of the route wherever possible. The cable corridor will be refined during the detailed design and the EIA process in order to identify a cable route corridor which is optimal from an environmental, economic and engineering perspective.

The onshore cable system will be installed in up to four trenches, with cables drawn through installed ducts. Other methods for cable installation such as HDD will be used as required to avoid or minimise potential effects where constraints are identified, including to cross environmentally sensitive water courses, major roadways and railways. Fibre optic cables will be installed alongside the transmission cables for communication and monitoring purposes. The onshore cable will not be oil-filled and there are no fluids required to be introduced into the cable trenches. The trenches will then be backfilled, with approximately 1m of soil covering the cables and ducts.

The onshore cable route will be constructed in stages or sections along the route. The trenches will be excavated, the cable ducts will be laid, the trenches backfilled and the reinstatement process commenced. At regular intervals along the route joint bays will be installed to enable the cable installation and connection process. The joint bays are subsurface structures with an associated link box located at or above ground level. These link boxes enable electrical checks and testing to be carried out on the cable system during operation.

During construction, a temporary construction corridor will be defined which will incorporate temporary working areas to provide access and allow for safe construction. In particular, the temporary construction corridor will provide access to construction traffic, and space for cable assembly, cable trench excavation, and storage space for excavated topsoil and subsoil in separate stockpiles. It is expected that the width of the cable construction corridor for surface trenching will be approximately 50m. At any sensitive points identified along the route, the working width of the temporary construction corridor will be reduced as far as practicable to avoid or minimise potential effects.

The temporary construction corridor may also require widening beyond the standard width in predetermined locations to allow sufficient space for access at crossings, avoidance of obstacles, directional drilling, and the application of trenchless techniques.

A number of temporary construction laydown areas will be required along the temporary construction corridor to accommodate construction equipment, materials, and site offices.

On completion of construction the cable construction corridor land will be reinstated to its former condition with the haul road, any soil storage and stock fences removed. Where underground cables are installed, a permanent easement will be agreed with landowners, or failing agreement acquired using compulsory acquisition powers, to enable access for inspections and maintenance during operation of Rampion 2.

Should construction of the offshore wind farm be undertaken in phases, it may not be possible to install all onshore cables in a single operation. For any remaining cables, ducts will be installed in the trenches in the initial phase to allow the cables to be drawn through the ducts as later phases of the Proposed Development are brought forward. This approach will remove the need to undertake repeat excavations along the route. The only exception to this are potential areas along the route that are identified for HDD to enable crossing sensitive locations. On completion of cable installation, the haul road, and any construction compounds will be removed, and the cable corridor will be fully reinstated.

A number of temporary construction laydown areas will be required along the temporary construction corridor to accommodate construction equipment, materials, and site offices.

On completion of construction the cable construction corridor land will be reinstated to its former condition with the haul road, any soil storage and stock fences removed. Where underground cables are installed, a permanent easement will be agreed with landowners, or failing agreement acquired

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Onshore substation

Rampion 2 will connect to the National Grid's Bolney substation in West Sussex and in order to connect the transmission cable to the electricity network, a new substation will be required. The onshore substation will be located on land in proximity (up to circa 5km) to the existing National Grid 400kV substation at Bolney. The overall site footprint for the proposed onshore substation is anticipated to be up to 4.5 hectares (ha), and the exact location of the substation will be confirmed as the detailed design, the EIA process and landowner discussions progress.

Construction works for the onshore substation will include creation of site access, site preparation works, installation of underground services and foundations, construction of the building, installation of electrical equipment, installation of perimeter fencing, and landscaping.

The onshore substation will contain necessary transmission equipment including transformers, reactors, capacitor banks, and open busbars. The substation will also house switchgear and controls, and welfare facilities.

Environmental Aspects

In summary, HDC is in broad agreement with the methodologies outlined in the scoping report to be broadly appropriate for our areas of interest.

It should however be highlighted that the Council's formal EIA scope can change at any time during the EIA should additional receptors and potential impacts be identified as further project details emerge. This letter should also not be taken to imply any acceptance of the planning merits of the scheme and simply sets out the Council's Scoping Opinion as it currently exists.

Indeed, given the scale of the necessary new substation and its potentially significant visual impact on the immediate surroundings of where it is sited, careful consideration should be given to its location. It is HDC's strong view that the existing sub-station site should be utilised and expanded for Rampion 2 to limit its visual impact.

The Council wishes to highlight the following key comments:-

Socio-Economics

In terms of establishing the baseline conditions, HDC has an adopted Infrastructure Delivery Plan (IDP) that should be referred to in terms of assessing existing facilities/capacity and likely requirements: <https://www.horsham.gov.uk/planning/local-plan/local-plan-review-evidence-base>

This section should acknowledge the various settlements and employment sites within the Study Area; in particular the communities of Henfield, Partridge Green, and Cowfold, and the Key Employment Area at Star Road/Huffwood Trading Estate, Partridge Green, and the various Parish Councils along the cable route and near the substation.

The cable construction has the potential to result in socio-economic impacts, as has the new substation. To offset the socio-economic impacts, and to ensure that the benefits of the project are

focused on the local area which will be subject to the greatest adverse impacts, consideration should be given to employees being sourced within an appropriate distance of the site.

Linked to the above two points is the matter of continued access to and maintained or enhanced Green and Social Infrastructure. The proposals represent an opportunity to implement improvements to the Green Infrastructure network; within the Study Area are numerous Public Rights of Way and 11 local green spaces allocated within Neighbourhood Plans.

The Downs Link, for example, is routed through the study area. Established in 1984 as a link between the North and South Downs, is a scenic, flat bridleway between Guildford in the North and Shoreham-by-Sea in the South. It is a key recreational asset in the district and its most popular cycle route and offers beginner, intermediate and experienced options.

The Wiston Whole Estate plan also takes quite a large area of the Study Area. Any conflicts with the estate plan objectives and other potential mitigation measures should be considered: <https://www.southdowns.gov.uk/planning-policy/whole-estate-plans/endorsed-whole-estate-plans/>

Development Plan

Our current Local Plan is called the Horsham District Planning Framework 2015 – 2031 (HDPF). The HDPF is the overarching planning document for Horsham District excluding the South Downs National Park. The HDPF sets out the planning strategy for the years up to 2031 to deliver the social, economic and environmental needs of the whole district, as well as looking beyond the district's boundaries. It identifies six priority themes for the Council: https://www.horsham.gov.uk/data/assets/pdf_file/0016/60190/Horsham-District-Planning-Framework-2015.pdf

The following plan policies from the HDPF are relevant to the Proposed Development:

- Policy 1 Sustainable Development
- Policy 24 Strategic Policy: Environmental Protection
- Policy 25 Strategic Policy: District Character and the Natural Environment
- Policy 26 Strategic Policy: Countryside Protection
- Policy 30 Protected Landscapes
- Policy 31 Green Infrastructure and Biodiversity
- Policy 32 Strategic Policy: The Quality of New Development
- Policy 33 Development Principles
- Policy 34 Cultural and Heritage Assets
- Policy 35 Strategic Policy: Climate Change
- Policy 36 Appropriate Energy Use
- Policy 37 Sustainable Construction
- Policy 38 Strategic Policy: Flooding
- Policy 39 Strategic Policy: Infrastructure Provision
- Policy 40 Sustainable Transport

Storrington Sullington and Washington Neighbourhood Plan 2018- 2031 coverage is partly within the Study Area. This includes policy allocations Policy 3: A24 Corridor and Policy 4: North Farm, Wiston Estate, Washington: <https://www.horsham.gov.uk/planning/neighbourhood-planning/storrington-sullington-and-washington-neighbourhood-planning>

The HDC Site Specific Allocations of Land (SSAL) DDP details a development proposal for new homes at the north end of Henfield, which falls within the Study Area. <https://www.horsham.gov.uk/planning/planning-policy/site-specific-allocations-of-land>

HDC is undertaking a Local Plan review. We consulted on the Regulation 18 Draft Local Plan between 17 February and 30 March 2020.

<https://strategicplanning.horsham.gov.uk/consult.ti/LocalPlanReview/consultationHome>

It has set a minimum target for our District of at least 965 new houses each year to 2036. We are also obliged to see if we can meet the housing needs from surrounding areas such as Crawley. This could mean our housing number will rise to over 1200 per year. The aim of the Local Plan is to allocate specific sites where it believes the new homes can be built over a long period. One such site falls directly within the Study Area:

Land North East of Henfield (Mayfield). The land promoter for this 310 hectare site has suggested that the site could bring forward around 7,000 homes, with supporting community and employment allocations, and a new link to A23, although not all of this would be completed before 2036:

https://www.horsham.gov.uk/data/assets/pdf_file/0010/80947/Land-North-East-of-Henfield-Mayfield.pdf

This is largest proposed Local Plan Review site within the search area but there are other smaller but still significant sites, such as around Partridge Green.

The timetable for our Local Plan review is set out in the link below, so you know the key dates and consultation periods. Please note that the above site is being assessed as a potential site under the Local Plan Review. Whether this site is taken forward under the Local Plan Review will be decided at the end of this year under Regulation 19. Our current estimated timescale is set out in the link below.

<https://www.horsham.gov.uk/planning/local-plan/local-plan-review-timetable>

Seascape, Landscape and Visual Amenity

SLVIA and LVIA

The 50km study area for the SLVIA offshore assessment and 2km study area for the LVIA onshore assessment is considered appropriate and agreed with.

HDC has taken note of and is satisfied with the initial embedded environmental measures proposed to reduce the potential impacts. It is confirmed the approach and methodology (appendix C and D) proposed to assess both the SLVIA and LVIA follows the current guidance and is considered comprehensive and proportionate.

A considerable extent of the Study Area falls within the landscape designations of the South Downs National Park and High Weald Area of Outstanding Natural Beauty. Key viewpoints have been identified and additional ones, to cover the assessment of views for the new onshore substation, will be agreed in due course and therefore HDC has no further requirements or comments to add at this stage.

The Council would welcome the opportunity to further refine the scope of the visual impact assessment as pre-application discussions progress.

Site-specific Visual Impact

Given the scale of the necessary substation and its potentially significant visual impact on the immediate surroundings of where it is sited, careful consideration should be given to its location. It is HDC's strong view that the existing sub-station site should be utilised and expanded for Rampion 2 to limit its visual impact.

Air Quality and Noise and Vibration

The main impacts from the proposed development on air quality will be from laying the underground electric cables from the offshore windfarm to the substation in Bolney. The applicant will use IAQM guidance on the Assessment of Dust from Demolition and Construction (2014) to assess and mitigate the impacts, which is the methodology that HDC recommends.

Regarding the assessment proposed in the Scoping Report, the focus of the assessment should be on mitigating the impacts. In accordance with the Air Quality And Emissions Mitigation Guidance for Sussex (2019), HDC endorses a low emission strategies approach to preventing and/or reducing air quality impacts, which entails encouraging mitigation from all 'major' development. To follow the message of low emission strategies, the Council would recommend that the mitigation plan for the construction/decommissioning phases of the project should include measures such as the compliance of construction traffic with the requirements of the London Ultra-Low Emission Zone.

Both Storrington and Cowfold Air Quality Management Areas (AQMA) are referenced in the Scoping Report. While the cable route does not pass through these areas directly, the Council's expectation is for a 'preferred route' to be used by all construction vehicles. The existing substation at Bolney is within 5km of the AQMA, therefore if traffic is to go via this route, the impact of traffic on this junction during the construction phase should be considered.

A major cause of air pollution in the Cowfold AQMA is the build up of traffic leading into the double roundabout in the village centre. This problem is worsened due to the stop start nature of this traffic, which cause a build up of pollutants. Because construction vehicles are often slow moving, if any construction vehicles are to pass through Cowfold, their movement should not restrict the constant flow of traffic through the village

Terrestrial Ecology and Nature Conservation

The potential impact of the proposals upon features of nature conservation interest and opportunities for habitat creation should be included within the ES in accordance with appropriate guidance on such matters.

Both The Mens SAC and Ebernoe Common SAC (Sussex bat SACs) lie within West Sussex and the Impact Risk Zone identified by Natural England includes Horsham District. The Mens SAC is located west of the Study Area and lists barbastelle bats as a qualifying feature. Ebernoe Common SAC is also to the west, and lists barbastelle and Bechstein's bats as qualifying features. Arun Valley SAC, SPA and Ramsar is to the south west and lists rare and diverse plant, invertebrate and bird assemblages as qualifying features. The Ashdown Forest SAC is to the east of the Study Area and lists heathland plants and habitat as qualifying features.

The Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol provides advice for developers and local Councils when assessing applications which fall within an identified 12 km Impact Zone for The Men's SAC, Ebernoe Common SAC and Singleton and Cocking tunnels SAC. In line with this Protocol, this application is located within the Wider Conservation Area and significant impacts or severance to flight lines need to be considered.

Habitat connectivity and availability for foraging and commuting Barbastelle bats (functionally linked land) should be considered. Barbastelle bats are qualifying features for both SACs, and threats and issues relating to this species in the wider area have been identified in the relevant SIPs as: off-site habitat availability/management; habitat fragmentation/Habitat connectivity for barbastelle bats; and changes in land management, with reference to foraging and commuting routes.

The proposed cable route crosses hedgerows and the River Adur. If there are opportunities for additional hedge planting, such as gapping up breaks in hedgerows and re-connecting hedges, and river restoration this would reduce the negative impact upon the qualifying features of The Mens SAC (the Barbastelle bat). This should be enhanced provision rather than only replacing the same length of hedgerow or area of other habitat as would be affected.

SSSIs of nationally designated nature conservation also fall within or adjacent to the Study Area, and within the Study Area here are some 50 parcels of Ancient Woodland and a significant number of Ancient Orchards and numerous Tree Preservation Orders.

Therefore there is potential to result in significant impacts on habits and species, particularly if the construction-period impacts are not appropriately managed, or mitigated. There should be early

provision of an Ecological and Landscape Management Plan to ensure that measures within it are appraised as early in the process as possible. The aftercare period is particularly important.

Attention should be given to seeking opportunities for biodiversity enhancement, rather than just mitigation.

Wilder Horsham District is a five-year partnership between Sussex Wildlife Trust and Horsham District Council that aims to take a wider landscape approach to enhance wildlife and not restricting actions to specific sites. However, there are certain landscapes and areas of the Horsham District that will be the focus of the work of the partnership. At present these are:

- Hedgerows in the Low Weald (providing important connectivity between fragmented habitats)
- Woodland - New planting and allowing natural regeneration are important tools in capturing more carbon and helping wildlife
- The Adur catchment; improve freshwater and floodplain habitats, water quality and flood resilience through working with natural processes
- Join up key sites, such as the Knepp Estate with the woodland to the north-east of Horsham town and The Mens in the west of the District, creating the core of a District-wide ecological network
- Take action to support pollinating insects throughout the District, in both towns and rural areas

<https://www.horsham.gov.uk/climate-and-environment/wilder-horsham-district>

It will also link to the work of the Sussex Local Nature Partnership which has recently adopted the Sussex Natural Capital Investment Strategy. This document, the result of cross sector collaboration (Local Authorities are currently represented at a county and unitary level) provides guidance and a shared framework for nature's recovery in Sussex. This seeks to ensure that biodiversity is enhanced within new development sites, where this is not possible. <http://sussexlnp.org.uk/>

It is also noted Sussex Wildlife Trust has a current offshore sea kelp restoration initiative along the coastline between Littlehampton and Brighton: <https://sussexwildlifetrust.org.uk/helpourkelp>

Transport

The detailed scope of the assessment of highway and transport implications will be advised by the Local Highway Authority, WSCC. Within its remit HDC is in broad agreement with the assessment methodology detailed in the Scoping Report.

Ground Conditions

HDC is satisfied with the assessment methodology detailed in the Scoping Report.

Historic Environment

Within the Study Area are located a significant number of heritage assets (designated and non-designated) including two Conservation Areas (Washington and Henfield) and some 180 Listed Buildings and numerous Scheduled Ancient Monuments. The locality is known to contain extensive archaeological remains.

HDC is broadly content the description of the approach to the study and assessment of the proposal and its impact to the historic environment is detailed and robust.

Water Environment

HDC is in broad agreement with the assessment methodology detailed in the Scoping Report with the inclusion of Hydrogeology, Hydrology and Flood Risk.

The Scoping Report has identified the current areas of flood risk and potential pathways. It should be noted however that there are a number of smaller ordinary watercourses, such as ditches, within the Study Area that may not have been mapped for flood risk due to their catchment size.

Based on the flood map, parts of the Study Area are shown to be located with Flood Zone 2 and 3. However the majority of the cable corridor is within Flood Zone 1. As the site contains Flood Zones 2 and 3, the Sequential test applies to this development.

The Study Area includes a stretch of the River Adur, its tributaries and impoundments. HDC would encourage the opening up of culverts and other appropriate river restoration or land management techniques to be incorporated with existing flow routes to deliver flood risk and water quality improvements along the cable route, particularly where known upstream flood risk to adjacent areas can be reduced by improving conveyance and storage areas.

Conclusion

I confirm that this letter forms Horsham District Council's consultation response before adoption of the Scoping Opinion. This is to inform the Planning Inspectorate of the information that Horsham District Council considers should be provided in the ES.

Yours sincerely,

Matthew Porter
Senior Planning Officer

CEMHD Policy - Land Use Planning
NSIP Consultations
Building 1.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: EN010117
Our ref: 4.2.1.6722

HSE email: NSIP.applications@hse.gov.uk

FAO Mr Richard Kent
The Planning Inspectorate
Temple Quay House
Bristol, BS1 6PN
(By email)

Dear Richard Kent

28th July 2020

**Proposed Rampion 2 Offshore Windfarm (the project)
Proposal by Rampion Extension Development Limited c/o RWE Renewables UK Limited (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as
amended) – Regulations 10 and 11**

Thank you for your letter of 6th July 2020 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records there is one major accident hazard site and two major accident hazard pipelines within the indicated red line boundary for this nationally significant infrastructure project; as illustrated in, figure 1.1 'scoping boundary' as part of the document 'Rampion Extension Development Limited, Rampion 2 Offshore Wind Farm Environmental Impact Assessment Scoping Report' by Wood Environment & Infrastructure Solutions UK Limited; July 2020

Major accident hazard site:

1.HSE ref H2094 operated by Aerosol Manufacturing Plc.

Major accident hazard pipelines:

1.HSE ref 8043, operated by Southern Gas Networks; Henfield / Crossbush (GM14)

2.HSE ref 8037, operated by Southern Gas Networks; Mogador / Dyke (GM8)

HSE's Land Use Planning advice would be dependent on the location of areas where people may be present. When we are consulted by the Applicant with further information under Section 42 of the Planning Act 2008, we can provide full advice.

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended.

The substances, alone or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended.

HSC would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in Schedule 1 of these Regulations. Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 Annex on the Planning Inspectorate's website - [Annex G – The Health and Safety Executive](#). This document includes consideration of risk assessments on page 3. Please see the lockdown comments below.

Explosives sites

HSE has no comment to make in this regard, as there are no licensed explosive sites showing in the area of the proposed development.

Electrical Safety

No comment, from a planning perspective.

During lockdown, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at nsip.applications@hse.gov.uk. We are currently unable to accept hard copies, as our offices are closed.

Yours sincerely,
Vicky Chignell
CEMHD4

Kent, Richard

From: Harry Gregory <harry@littlehampton.org.uk>
Sent: 30 July 2020 17:34
To: Rampion2
Cc: James Milne; Natalie Hirst; Eleri Wilce
Subject: FW: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Good Afternoon,

Please find below my comments on the scoping report as Harbour Master for Littlehampton. We received this request via two different channels so I have included all at CC.

Firstly, I'd like to say that we are hugely supportive of this project and I hope that Littlehampton will have plenty to offer to support the project during construction whether quayside space, berthing, pilotage or workboat services.

Given our proximity to the western end of the windfarm scoping area as well as the cable landing site we naturally would expect to be involved in the subsequent Navigational Risk Assessment. The same will be true of many leisure and commercial organisations and individual stakeholders here - we would happily help facilitate this process locally here using our established stakeholder engagement setup. My main comment is the classification of Littlehampton as "recreational" on page 306 is potentially misleading.

- **Proximity to harbour entrance:** I note that Littlehampton is listed as 13.1nm from Rampion 2. I'm not certain from which point in the scoping boundary this is measured from but I estimate the nearest edge of the proposed farm boundary as around 7NM from our harbour entrance. Furthermore, the proposed cable landing envelop lands as close as 0.5M and within our pilotage district.
- **Pilotage:** The shoreward 2nm of the cable landing envelope falls within our Competent Harbour Authority area so there is likely to be a need for pilotage during some types of vessel operation in this area. The eastern edge of the cable envelope is also immediately adjacent to our pilot boarding station. This can all be further reviewed during the NRA.
- **Commercial Vessels:** Littlehampton's two commercial quaysides (currently leased to Tarmac Ltd) are used for the import of roadstone in coasters of up to 80m LOA / 2000gt. I have included the number of commercial calls and imported cargo tonnage in recent years is as below. Also notably, the upcoming construction of the A27 Arundel bypass in the few years will require approximately 300,000 tonne of roadstone in the harbour's immediate vicinity. The expectation is that as much of this as practical would be imported via sea for processing via Littlehampton's Tarmac plant. With regard to AIS analysis, due to the under keel clearance at Littlehampton's harbour entrance, it should be noted that these calls occur only on the spring tide windows so are often missed in AIS sampling. Littlehampton has currently 10 commercial fishing vessels, 7 active charter angling vessels and 3 active resident workboats – very few of whom have AIS. Shingle recycling, sheet piling and other associated flood defence efforts in the harbour and local waters also bring additional workboat traffic periodically. The construction process and the farm in operation is likely to bring impact to all of these groups.

Year	Number of calls	Total cargo tonnage
2012/13	26	34,452
2013/14	19	28,912
2014/15	19	25,793

2015/16	21	30,753
2016/17	14	27,505
2017/18	5	9,849
2018/19	16	28,114
2019/20	10	23,394

- **Recreational Vessels:** It should also be noted that due to their size, the vast majority of recreational vessels operating from Littlehampton do not use AIS so this cannot be relied on as the only source of vessel traffic. Each year, Littlehampton has approximately 350 moored vessels, 170 frequently launching slipway users, 600 overnight stays from vessels visiting from sea, and approximately 200 further day launches of visiting trailered vessels (paying daily launch fees).
- **Harbour Entrance Breakwater and Training Walls:** The harbour entrance breakwaters are due replacement by 2025 which will be a significant infrastructure project underway at perhaps the same as the windfarm construction

Kind regards,

Harry Gregory

Harbour Master

Littlehampton Harbour Board

Harbour Office, Pier Rd, Littlehampton, BN17 5LR

T: +44(0)1903 721 215

E: harry@littlehampton.org.uk / harbour@littlehampton.org.uk

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From: Rampion2 <Rampion2@planninginspectorate.gov.uk>

Sent: 06 July 2020 11:57

Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Dear Sir/Madam

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020 and is a statutory requirement that cannot be extended.

Karen Wilkinson
EIA and Land Rights Advisor
Major Casework Directorate

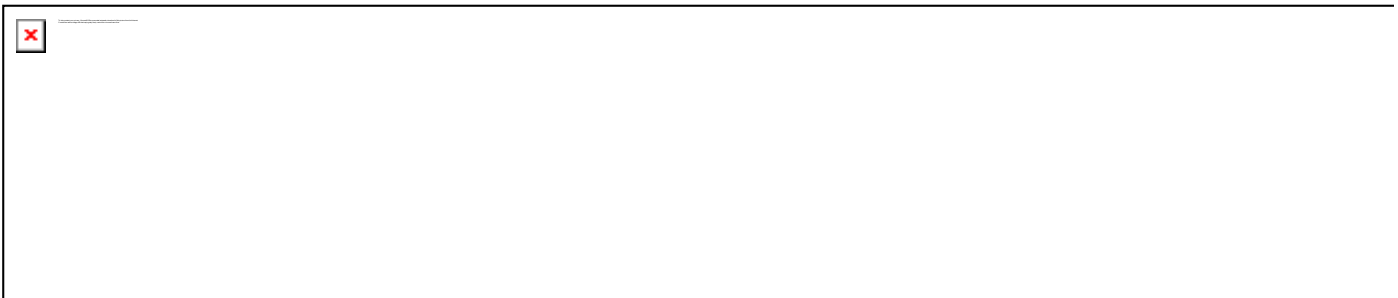
Direct Line: 0303 444 5072
Helpline: 0303 444 5000
Email: karen.wilkinson@planninginspectorate.gov.uk

Please note my working days are Monday, Thursday and Friday.

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

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DPC:76616c646f72



Kent, Richard

From: Emily Jordan <ejordan@littlehampton-tc.gov.uk>
Sent: 28 July 2020 11:55
To: Rampion2
Cc: Juliet Harris
Subject: Rampion 2 Offshore Windfarm Consultation

Importance: High

The Town Council's Planning and Transportation Committee considered this matter at its meeting held on Monday 20th July 2020 And comment as follows:

27.2 Rampion 2 Offshore Windfarm Consultation

The Committee received a report (previously circulated) which set out a summary of the proposals to expand the existing offshore wind farm westwards to Littlehampton reaching landfall at Climping. It was noted that the exact position of where the infrastructure supporting the farm would make landfall had yet to be identified. The decision-making process for major infrastructure projects such as this was lengthy, and this initial consultation sought comments on the scope of work that would be needed in the planning process. Reviewing the summary of activities, the Committee highlighted the following aspects as matters they wished to see included in the scoping work:

- Impact of the construction and operation of the wind farm on the local fishing fleet that operated out of Littlehampton Harbour.
- Onshore impact locally during the construction phase.
- The inclusion of an analysis of Phase 1 to sit alongside the Phase 2 work and cross referenced at all stages throughout the project.

It was therefore **RESOLVED** that:

The comments as set out in Minute 27.2 above, be forwarded to the Planning Inspectorate.

Emily Jordan
Committee & Administration Support
Littlehampton Town Council
[REDACTED]

The poster features the HM Government logo on the left and the NHS logo on the right. In the center, there are four circular icons: a thermometer, a person coughing, a mouth with a slash, and a nose with a slash. Below these icons, the text reads: 'CORONAVIRUS STAY ALERT TO THE SYMPTOMS', 'HIGH TEMPERATURE OR NEW CONTINUOUS COUGH OR LOSS OF TASTE OR SMELL?', and 'Find out how to get a test, and how long to isolate, at nhs.uk/coronavirus'. On the right side, there is a yellow box with green borders containing the text: 'STAY ALERT', 'CONTROL THE VIRUS', and 'SAVE LIVES'.

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Maritime &
Coastguard
Agency

Bay 2/24
Spring Place
105 Commercial Road
Southampton
SO15 1EG
UK

Your ref: EN010117-000006
Our ref:

Major Casework Directorate
Temple Quay House
2 The Square
Bristol, BS1 6PN

29 July 2020

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion 2 Offshore Wind Farm (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

The MCA has reviewed the scoping report provided by Rampion Extension Development Limited on the Rampion 2 offshore wind farm, as detailed in your letter of 6 July 2020 and would comment as follows:

The Environmental Statement should supply detail on the possible impact on navigational issues for both commercial and recreational craft, specifically:

- Collision Risk
- Navigational Safety
- Visual intrusion and noise
- Risk Management and Emergency response
- Marking and lighting of site and information to mariners
- Effect on small craft navigational and communication equipment
- The risk to drifting recreational craft in adverse weather or tidal conditions
- The likely squeeze of small craft into the routes of larger commercial vessels.

The development area carries a significant amount of through traffic to major ports, with a number of important international shipping routes in close proximity, and attention needs to be paid to routing, particularly in heavy weather ensuring shipping can continue to make safe passage without large-scale deviations. We are concerned over the available sea room it leaves for vessels entering and exiting the Inshore Traffic Zone. We also have concerns on the impacts this will have on the safety of both commercial vessels and pilot boats during pilotage operations. The likely cumulative and in combination effects on shipping routes should also be considered, the impact on navigable sea room and include an appropriate assessment of the distances between wind farm boundaries and shipping routes as per MGN 543.



HM Coastguard



INVESTORS
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A Navigational Risk Assessment will need to be submitted in accordance with MGN 543 (and MGN 372) and the MCA Methodology for Assessing the Marine Navigation Safety & Emergency Response Risks of Offshore Renewable Energy Installations (OREI). This NRA should be accompanied by a detailed MGN 543 Checklist which can be found at <https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping>

We note that a vessel traffic survey will be undertaken to the standard of MGN 543. The survey will consist of 28 days of seasonal data (two x 14-day surveys) collected from a vessel-based survey using AIS, radar and visual observations to capture all vessels navigating in the study area. We welcome discussions to agree survey plans.

The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 543 Annex 5, will be agreed at the approval stage.

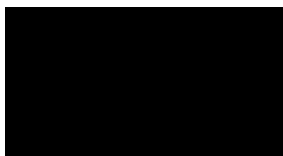
Attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and, subject to the traffic volumes, an anchor penetration study may be necessary. If cable protection measures are required e.g. rock bags or concrete mattresses, the MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the HDD location.

Particular consideration will need to be given to the implications of the site size and location on SAR resources and Emergency Response Co-operation Plans (ERCoP). Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas. A SAR checklist will also need to be completed in consultation with MCA.

MGN 543 Annex 2 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. Failure to report the survey or conduct it to Order 1a might invalidate the Navigational Risk Assessment if it was deemed not fit for purpose.

On the understanding that the Shipping and Navigation aspects are undertaken in accordance with MGN 543 and its annexes, along with a completed MGN checklist, MCA are likely to be content with the approach.

Yours faithfully,



Nick Salter
Navigation Safety Policy Advisor
Navigation Safety Branch

Kent, Richard

From: Nick Rogers <Nick.Rogers@midsussex.gov.uk>
Sent: 03 August 2020 11:23
To: Rampion2
Cc: Sally Blomfield; Andrew Marsh; Stuart Malcolm
Subject: EN010117-000006
Attachments: EN010117 Rampion 2 Offshore Windfarm EIA Scoping notification and consultation

Dear Mr Kent,

Thank you for your letter dated 6th July regarding the above.

I advise that we have no comments to make on the scoping consultation.

Regards

Nick Rogers

Nick Rogers BA(Hons) MA MRTPI
Business Unit Leader-Development Management
Planning Services
Tel: +44 (0)1444 477341
Nick.Rogers@midsussex.gov.uk

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Rampion 2 Case Team
Planning Inspectorate
Rampion2@planninginspectorate.gov.uk
(Email only)

MMO Reference: DCO/2019/00005

4 August 2020

Dear Mr Kent,

Formal scoping request under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 for the proposed Rampion 2 Offshore Wind Farm Project by Rampion Extension Development Limited (RED).

Thank you for your scoping opinion request of 6 July 2020 and for providing the Marine Management Organisation (MMO) with the opportunity to comment on the Rampion 2 Offshore Wind Farm Environmental Impact Assessment (EIA) scoping request.

The MMO's role in Nationally Significant Infrastructure Projects

The MMO was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to contribute to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas. The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Welsh and Northern Ireland offshore waters by way of a marine licence¹. Inshore waters include any area which is submerged at mean high water spring ("MHWS") tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area. In the case of Nationally Significant Infrastructure Projects ("NSIPs"), the 2008 Act enables Development Consent Order's ("DCO") for projects which affect the marine environment to include provisions which deem marine licences².

As a prescribed consultee under the 2008 Act, the MMO advises developers during preapplication on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or removal within the marine area, this also includes assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works. Where a marine licence is deemed within a DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence ("dML") enable the MMO to fulfil these obligations. Further information on licensable activities can be found on the MMO's website³. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note⁴.

¹ Under Part 4 of the 2009 Act

² Section 149A of the 2008 Act

³ <https://www.gov.uk/planning-development/marine-licences>

⁴ <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2013/04/Advice-note-11-v2.pdf>

Please find attached the scoping opinion of the MMO. In providing these comments, the MMO has sought the views of our technical advisors at the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and the MMO Coastal Office - South Eastern Area.

The MMO reserves the right to make further comments on the project throughout the preapplication process and may modify its present advice or opinion in view of any additional information that may come to our attention. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

If you require any further information, please do not hesitate to contact me using the details provided below.

Yours Sincerely

A black rectangular box redacting the signature of Rebecca Reed.

Rebecca Reed
Marine Licensing Case Officer

D +44 (0)2080268854

E Rebecca.Reed@marinemanagement.org.uk

Scoping Opinion

Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (“the Regulations”)

Title: Rampion 2 Offshore Wind Farm (Rampion 2)

Applicant: Rampion Extension Development Limited (RED)

MMO Reference: DCO/2019/00005

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1. Proposal

Thank you for your letter dated 6 July 2020 consulting the Marine Management Organisation (MMO) on the EIA Scoping report submitted by RED in respect to an application for development consent under the Planning Act 2008 (the “2008 Act”) to Rampion 2 Offshore Wind Farm.

1.1 Project Background

1.1.1 Rampion Offshore Wind Farm (Rampion 1) was granted consent on 16 July 2014 and was developed following award of Zone 6 in the United Kingdom Round 3 offshore wind development leasing round run by The Crown Estate (TCE) in 2009. Rampion 1 is located between 13km and 25km from the Sussex coast, it occupies some 78km² with an installed capacity of 400 megawatts (MW). Rampion 1 connects into the onshore transmission network via a new substation located next to the existing 400 kilovolt (kV) substation at Bolney in Mid Sussex, approximately 27km inland from a landfall located at Worthing, West Sussex.

1.1.2 Rampion 2 will be located within an Area of Search adjacent to the existing Rampion 1 project comprising a seabed area awarded in 2019 under the TCE wind farm extension process (to the west of Rampion 1) and development within the remainder of the original Round 3 Zone 6 area (to the south east of Rampion 1) together with a small link or ‘bridge’ area between the two areas for cabling.

1.1.3 Rampion 2 is finalising an Agreement for Lease with TCE for the wind farm array with an additional lease required for the export cable corridor and adjoining cabling ‘bridge’.

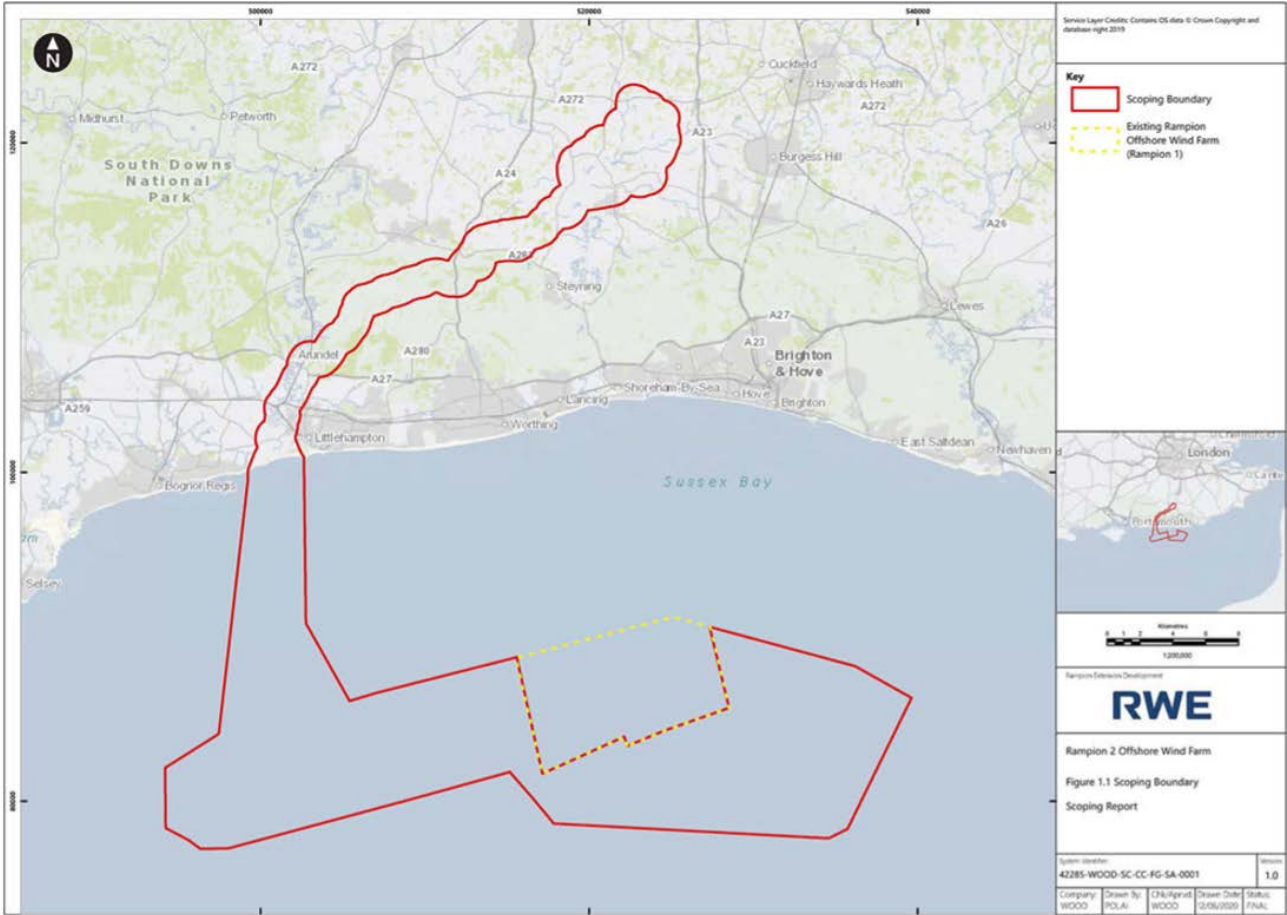
1.1.4 Rampion 2 comprises of both onshore and offshore infrastructure associated with an offshore wind farm including:

- offshore wind turbine generators (WTGs) and associated foundations, inter-array cables with an installed capacity of up to 1200MW but not exceeding the number of WTGs installed at Rampion 1;
- up to three offshore substations;
- up to four offshore export cables will be installed, each in its own trench within the overall cable corridor;
- a single landfall site using Horizontal Directional drilling (HDD) installation techniques;
- buried onshore cables in a single corridor approximately 36km in length; and
- a new onshore substation that will connect to the existing substation at Bolney, Mid Sussex.

2. Location

The Rampion 2 Offshore Windfarm is located between 13km and 25km from the Sussex coast, the Scoping area is displayed in Figure 1 below.

Figure 1: The Scoping Boundary of Rampion 2



3. Scoping Opinion

Pursuant of regulations 10 and 11 of the Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations), RED have requested a Scoping Opinion from the MMO.

In so doing a Scoping Report entitled 'Rampion Extension Development Limited Rampion 2 Offshore Wind Farm Environmental Impact Assessment Scoping Report' has been submitted to the MMO for review.

The MMO agrees with the topics outlined in the Scoping Report and in addition, we outline that the following aspects be considered further during the EIA and must be included in any resulting Environmental Statement (ES).

3.1 General Comments

3.1.1 The scoping report was very well-structured and easy to navigate.

3.1.2 The MMO highlights that the scoping does not specifically mention inter-relationship impacts i.e. how the ES will consider the combined significance of two different impacts affecting the same receptor (for example, both suspended sediment concentrations changes and scour affecting the same area).

3.2 Marine Planning

3.2.1 Paragraph 3.5.4 references that the South Inshore and Offshore Marine Plan Areas will be taken into consideration while preparing the EIA and ES. The MMO believes that for the final ES a table is produced to highlight all policies within these plans and whether these have been screened in or out, including justification. The MMO welcomes any further discussions with RED in relation to this.

3.3 Nature Conservation

3.3.1 The MMO notes that the Rampion 2 Scoping area is not within any Marine Protected Areas (MPAs) and acknowledge that Chapter 5.11 has referenced the MPAs that could be impacted.

3.3.2 The MMO defers to Natural England as the Statutory Nature Conservation Body (SNCB) on the suitability of the scope of the assessment with regards to MPAs.

3.4 Benthic Ecology

3.4.1 The MMO is content that all relevant impacts to benthic ecology has been scoped in (Table 5.5.4). All potential cumulative effects have been identified and it is stated that they are likely to be scoped in (Paragraph 5.5.48).

3.4.2 The MMO notes that the colonisation of hard substrates and the introduction/spread of non-indigenous species (NIS) are scoped in as separate impacts (Table 5.5.4). The MMO would expect the impacts of NIS on hard substrates to be included in the ES, including the potential, the infrastructure has, to be used as a stepping-stone for NIS to reach the designated hard habitats in the adjacent Kingmere MCZ.

3.4.3 The MMO is content with the approach to the scoping assessment for benthic ecology. The MMO notes existing data are available to help describe the benthic ecology baseline, both within the proposed development site and the surrounding area (Table 5.5.1).

3.4.4 Subtidal benthic ecology surveys (grabs and drop-down video) will be conducted during the summer of 2020 and used to provide new site-specific data on infauna, sediments, contaminants and habitats of conservation importance (paragraphs 5.5.9–5.5.10). Intertidal habitats will also be characterised using Phase I and Phase II habitat surveys (paragraph 5.5.11). The MMO supports the collection of contemporary, site-specific data to inform the benthic ecology baseline. However, as the details on the design of these surveys have not been provided, we cannot comment on the appropriateness of the resulting data. The MMO welcomes further discussions with RED on the approach to collection, analysing and assessing this data along with any potential mitigation measures that may be required.

3.4.5 The MMO is content with the proposed embedded mitigation. For any future additional mitigation, the MMO highlights that infrastructure should be positioned to avoid impacts on any features of conservation importance identified during baseline or pre-construction surveys.

3.5 Coastal Processes

3.5.1 The MMO is content that all coastal process impacts have been scoped in as pathways to other impacts (e.g. benthic habitats).

3.5.2 Paragraph 5.2.33 states that coastal processes are principally pathways to impact but identifies potentially sensitive receptors:

- the coastline (Selsey Bill to Beachy Head, including specifically the Climping Beach SSSI at the proposed landfall);
- East Bank and Outer Owers sandbanks; and
- designated seafloor areas Kingsmere Rocks and Offshore Overfalls MCZ.

3.5.3 The scoping report (paragraphs 5.2.8 to 5.2.16) lists coastal process impacts as:

- changes to suspended sediment concentrations and sediment deposition;
- changes to coastal geomorphology;
- changes to waves and hydrodynamics;
- changes to sediment transport and morphology; and
- scour around marine structures.

3.5.4 The MMO agrees with these broad definitions, noting that impacts can be direct and indirect e.g., morphology changes as a consequence of impacts on sediment transport pathways.

3.5.5 The MMO believes the description of the impact assessment methods and the combination of magnitude/sensitivity judgments is vague as no scales are provided detailing the magnitudes of coastal processes changes corresponding to the various levels. Throughout Section 4, the language used, and the precise application remains indistinct (e.g., Section 4.4.7 discusses ‘proportionate EIA’, justified by guidance, but based on ‘existing evidence base’ and ‘appropriate level of assessment’; Table 4.1 conflates the ‘Importance/Sensitivity/Value’ of receptors while the accompanying text adds ‘Quality’, without definition).

3.5.6 As a result, it is not clear how the scoping study has arrived at its initial assessments of all coastal processes impacts as ‘not significant’ and hence justifying a ‘simple’ assessment for the future EIA in each case. The MMO do not necessarily disagree with these judgments but highlight that the process is obscure and cannot be properly audited. In common with many EIA, the imprecise definitions of the judgment criteria

and the 'standard' process can be seen as inherently building the outcome (not significant) into the structure of the assessment – for example, the definition of receptors to include very large and distant features (coastline, sandbanks, MCZ seabed) effectively ensures that local impacts are not significant. Therefore, RED should ensure that the EIA and eventual Environmental Statement are more explicit as to the limits and criteria applied.

- 3.5.7 In relation to the approach to data gathering the MMO notes this is difficult to assess. The proposed 'simple' method of assessment appears to mean spreadsheets but these are not presented for scrutiny or described, so their suitability cannot be judged from the scoping. RED should ensure that this approach is sufficient to confidently encompass the spatial as well as temporal variation induced by the development in all assessed coastal processes.
- 3.5.8 With respect to assessment by analogy and professional judgment, this demands a high standard of certainty in the quality and applicability of the evidence. It is difficult to be prescriptive on the basis of the limited detail provided in the scoping stage, but several examples can be suggested – thus, it appears that RED will rely heavily on evidence gathered for Rampion 1. For Rampion 2, RED must clearly demonstrate that (for example) the areal extent of impacts on waves demonstrated for Rampion 1 translates to the combined Rampion 1 and 2, given the near quadrupling of sea surface area developed. The scoping does not provide case-by-case breakdown of what and how the analogies are to be made.
- 3.5.9 The brief consideration of cumulative impacts (paragraphs 5.2.36 and 5.2.37) notes that sediment disturbances due to Rampion 2 may interact with sediment disturbance due to adjacent aggregate dredging; or that Rampion 2 infrastructure may affect wave and tidal regimes in combination with other existing structures. RED should also acknowledge that [*sediment disturbances*] with [*wave and tide regime changes*] over the same area also represent a cumulative, in-combination change to the regional geomorphic system (and also consider that cumulative impacts may arise from consequent impacts, not simply from coincident impacts). With reference to paragraph 3.5.7 of this document, RED must ensure that the 'simple' assessment method is sufficiently robust to ensure that an impact assessment of 'not significant' is clearly defensible when considering the more complex and potentially more significant matters of combined or cumulative effects.

3.6 Fish Ecology and Fisheries

- 3.6.1 The scoping report has considered all the relevant conservational, ecologically and commercially important species. The MMO welcomes the following key species appear to have been identified as being taken forward for consideration and assessment in the EIA, namely:
- Spawning and nursery ground species: sandeel (*Ammodytidae*), European herring *Clupea harengus*, Atlantic cod *Gadus morhua*, black seabream *Spondyliosoma cantharus*, Dover sole *Solea* and European plaice *Pleuronectes platessa*;
 - Commercial species: sole, plaice, European seabass *Dicentrarchus labrax*, mackerel *Scomber scombrus* gilt-head seabream *Sparus aurata* and spurdog *Squalus acanthias*;

- Fishes of conservation importance: undulate ray *Raja undulata*, spurdog, porbeagle shark *Lamna nasus*, shortfin mako *Isurus oxyrinchus*, basking shark *Cetorhinus maximus*, tope *Galeorhinus galeus*, blue shark *Prionace glauca*, black seabream, sea trout *Salmo trutta*, European eel *Anguilla*, smelt *Atherina presbyter*, allis shad *Alosa*, twaite shad *A. fallax* and seahorses *Hippocampus* spp.

3.6.2 The MMO requires undulate ray nursery grounds are included in the EIA assessment as populations are locally important in the coastal waters of the region.

3.6.3 It is noted that potential likely significant effects on black seabream as a designated feature of the Kingmere MCZ will be considered within the EIA and MCZ assessment, which is appropriate. The approach to use geophysical survey data to inform the likely location of black bream nesting areas is supported, however further comments have been provided below.

3.6.4 The MMO understands that the Applicant is proposing to use data from the aggregate industry. Hanson Aggregates Marine Ltd (HAML) and Tarmac Marine Ltd (TM) have monitored the black bream nest distribution since 2002 in survey boxes using a combination of bathymetry and side scan sonar survey data for monitoring purposes related to Aggregate Areas 435 and 396. Nine black bream survey sites north of these licence areas have been monitored on an annual basis since the commencement of dredging in 2005 until 2009; since then they have been monitored biennially. Surveys were carried out in 2002 (characterisation survey), 2005, 2006, 2009, 2011, 2013 and 2015. In 2016, new marine licences were granted to TM for aggregate extraction in Areas 453 and 488. Area 453 is located entirely within the boundary of Kingmere MCZ, and Area 488 lies partly within the MCZ. The monitoring was adapted and refined in order to provide a baseline for Area 453 and 488, incorporating them into the survey design. A 'baseline' survey for the new licence areas was conducted in 2017 using the same bream survey sites and further annual monitoring surveys were undertaken in 2018 and 2019. Geophysical data was collected from seven locations and across two transects to establish black bream nest distribution and density. As there is potential for the black bream reproductive season to continue longer than previously thought (into July), it was requested that the on-going nest monitoring surveys be expanded to include visual assessments (drop-down video) of nesting activity beyond the end of June. The MMO believes there were inconsistencies in the timings of the post June monitoring during these surveys (2017 and 2018) partially due to inclement weather.

3.6.5 RED proposes to utilise Aggregate Industry DDV transect and bathymetry datasets (including sidescan interpretation) from 2017-2020 to create "a robust, multi-year baseline for EIA on potential impacts on black bream". Generally, the aggregates data is certainly a valuable source of data to help inform the EIA, however there are limitations to the dataset which need to be considered and caution should be applied when repurposing/reanalysing the data for use in the EIA. The MMO requires the data limitations of the aggregate data to be recognised in the EIA. RED have acknowledged that there has been change to the surveys and methods pre-2017 and are proposing to use the most recent data (2017-2020), which are more consistent in survey techniques and directly comparable across years. We are aware that post-2016 monitoring has been compared to the pre-2017 surveys and this provides background on the natural long-term changes to the black bream nest density within the survey areas. While it is recognised that some of the pre-2017 monitoring was conducted

outside of Kingmere MCZ, and that DDV was not conducted at all sites in all years, excluding this data from the Rampion 2 EIA would reduce the historic context of black bream nest distribution in the survey locations.

- 3.6.6 The post 2016 survey data includes sampling beyond June to potentially help ascertain if, and for how long, the reproductive season of black bream around Kingmere MCZ extends. For this sampling period there have been discrepancies between years with survey dates/months differing in timings post June and there were issues with image quality/consistency. Interpretation of the aggregate data requires some consideration of the environmental conditions which are likely to influence the onset of black bream spawning activity and thus potentially effect monitoring results. The aggregate data is spatially limited to the monitoring area; thus, it does not identify whether there are black bream nesting areas within/beyond the MCZ boundary and Rampion 2 search areas. Therefore, the MMO believes that this may not be sufficient to provide a baseline for the Rampion 2 EIA as aggregate monitoring data is comprised of specific sampling points each season, and these are within a defined geographic area. Additionally, the MMO notes that surveys conducted for Rampion 1 identified potential black bream nesting outside of the MCZ. The EIA assessment should include consideration of all potential nesting sites within the Rampion 2 and associated zone of influence.
- 3.6.7 Potential construction impacts such as accidental pollution, direct and indirect seabed disturbances leading to the release of sediment contaminants and direct disturbance resulting from array have all been scoped out for fish receptors. RED has adequately justified that these potential effects can be scoped out based on contaminated sediment information from Rampion 1 and that a Project Environmental Monitoring Programme (PEMP) and a Marine Pollution Contingency Plan (MPCP) will be established.
- 3.6.8 Operational impacts including operational turbine generated underwater noise, direct disturbance resulting from array and cable route maintenance and additional steaming to alternative fishing grounds are also proposed to be scoped out for fish and commercial fisheries. The MMO is content that justification has been provided to support the scoping out of these potential impacts.
- 3.6.9 However, RED is proposing to scope out the operational electromagnetic field (EMF) impacts arising from cables. It is recommended that the potential effects of EMF upon elasmobranchs and electro-sensitive fish receptors are considered in the EIA. The MMO recognises that the scoping report uses supporting evidence from Orpwood et al. (2015) and Armstrong et al. (2015) to justify that there is no risk of likely significant effects upon fish receptors from operational EMF however this is not supported by the MMO and its technical advisors therefore we recommend it is scoped in.
- 3.6.10 It is acknowledged that there is a currently a lack of evidence surrounding the impacts of anthropogenic magnetic and induced electrical fields on elasmobranchs and electro-sensitive fish receptors. Elasmobranchs are able to detect EMF emitted from cables and behavioural responses, such as attraction and avoidance measures, have been observed. However, whilst a number of studies have identified behavioural responses, such reactions are likely to vary depending on the strength of field being emitted, and the species and life stage being exposed, and there are limitations with many of the studies carried out.

- 3.6.11 The MMO notes to the best of our knowledge no empirical evidence of significant adverse effects on elasmobranchs (or other marine fauna) resulting from EMF has been recorded to date, conversely, there is no evidence to the contrary. There is limited information on impacts to marine fauna and their life stages, consequently significant uncertainties concerning electromagnetic effects remain (Gill, and Desender, 2020).
- 3.6.12 A recent study by Hutchison et al. (2020) found multiple statistically significant differences in the behavioural parameters of little skate *Leucoraja erinacea* and American lobster *Homarus americanus* when exposed to EMF from sub-sea cables with a target burial depth of 1.2–1.8 m.
- 3.6.13 Additionally, it should be noted that when considering the results from Orpwood et al. (2015), the authors highlight that the sample size was small, field strengths were lower than might be encountered in the wild in some situations and nocturnal behaviour was not tested. The latter can be important for *A. anguilla*. The MMO also notes that there does not appear to be a full reference provided within the scoping report for Armstrong et al. (2015).
- 3.6.14 The approach to provide a brief characterisation of the existing fish assemblage based on the Rampion 1 survey data, spawning and nursery ground information, and including discussion of commercial species and species of conservation importance is appropriate. In addition to this the MMO notes suitable data sources have been used and RED proposes to use a desk-based review approach to inform the EIA rather than undertaking any additional fish surveys. As the EIA will be supported and complemented by commercial landings, Vessel Monitoring System (VMS) and key species stock assessment data, the desk-based approach is suitable for describing the fish baseline in the ES.
- 3.6.15 The MMO acknowledges that impact mitigation and species-specific mitigations are not discussed in depth as these will be further defined during the EIA assessment. The embedded mitigation measures outlined within the scoping report are appropriate and these have the ability to be defined further throughout the Evidence Plan Process (EPP).
- 3.6.16 Minor comments in relation to Chapter 5.4 that do not require amendments:
- The scientific name for long snouted seahorse is incorrect and should be *Hippocampus guttulatus* instead of the stated southern hemisphere species *Hippocampus histrix*.
 - *Atherina presbyter* should be referenced as sand smelt, rather than smelt, as this could be confused with the European smelt *Osmerus eperlanus*, unless the latter is the intended species referred to in the scoping report. Especially as *O. eperlanus* has which have several conservation designations including being listed as species of principal importance under section 41 (England) of the NERC Act (2006).

3.7 Shellfish

- 3.7.1 RED has sufficiently identified shellfish species of commercial importance present at the site and identified Whelk, King Scallop and Lobster to be impacted by the development due to their limited mobility and inability to avoid any potential disturbance caused.

3.7.2 The MMO believes that all relevant impacts have been scoped in relation to shellfish and shell fishers and associated with commercial shell fishers.

3.7.3 A large quantity of data sources has been identified for use in relation to fish and shellfish species. The majority of sources identified are appropriate for fish only or have limited use in relation to shellfish. However, the use of MMO landings data, shellfish monitoring surveys conducted for Rampion 1 and presence/absence data from beam trawl surveys should provide a sufficient source of data when assessing the area. Shellfish specific site surveys may be required if this data shows Rampion 2 to be in a highly productive shellfish area.

3.7.4 The MMO believes that the use of fishing pattern data, ground-truthed by fishers and additional data sources to cover boats <12m that do not provide VMS data tracks is appropriate for gathering data regarding fishing activity.

3.8 Marine Mammals

3.8.1 The MMO has provided comments on impacts on marine mammals from underwater noise. The MMO defers to Natural England as the Statutory Nature Conservation Body (SNCB) in relation to all other potential impacts to marine mammals.

3.9 Underwater noise

3.9.1 The MMO welcomes and notes that it is appropriate that an assessment of underwater noise will be included (as an appended technical report to the ES). Chapter 5.9 highlights that underwater noise modelling is likely to be required, although the specifics of any assessment are not given at this stage but will be agreed through the EPP. The MMO believes this is reasonable as this will allow noise exposure thresholds to be derived from the most recent peer-reviewed literature at the time. The report correctly identifies that currently, the most appropriate thresholds are derived from Southall et al. (2019)⁵ for marine mammals, and Popper et al. (2014) for fish.

3.9.2 The MMO notes the fish species that are to be considered in the underwater noise assessment are sandeel, herring, cod, black sea bream, sole and plaice. Due to the local commercial importance of seabass we would recommend that this species is included in the underwater noise assessment.

3.9.3 In Chapter 5.7 the key marine mammal species to be considered include harbour porpoise, harbour seal, grey seal, common dolphin, bottlenose dolphin, white beaked dolphin and minke whale. Table 5.7.3 summarises the likely significant impacts/effects on marine mammals, and whether the effects are scoped in or out. It is appropriate that the following impacts are scoped in for further assessment:

- Permanent Threshold Shift (PTS) injury during construction – a detailed assessment;
- Disturbance during construction – a detailed assessment;
- Vessel disturbance during construction and operation – a simple assessment;
- Operational noise – simple assessment.

3.9.4 The MMO notes that some impacts have been scoped out from further assessment specifically the impact of Temporary Threshold Shift (TTS) and other project related

⁵ The Southall thresholds and weightings are the same as NMFS (NOAA) 2018.

noise (e.g. cable laying, ground clearance and dredging etc). The MMO believes these should be scoped in for further assessment, the reasoning for this is provided below.

3.9.5 The impact of TTS during construction has been scoped out (as per Table 5.7.3). A sufficient justification has been provided in paragraphs 5.7.28 to 5.7.29. Of relevance, the report states the following:

“A threshold shift (temporary or permanent) is essentially a reduction in hearing sensitivity....For TTS, the significance of any such consequences would be linked to unknown factors such as duration of TTS, magnitude of TTS, what aspect of an animals hearing has been affected etc. Therefore, the application of current TTS onset thresholds do not allow for an assessment of the likely consequences of any such effect on individuals or at population level. The focus of the assessment on auditory injury risk (PTS onset) and disturbance means, in any case, that potential consequences from TTS would be captured within the overall envelope of potential impact. The lack of any defined biological consequences from current thresholds for TTS, combined with the inclusion of any potential TTS consequences within the impact envelope covered by the assessment of disturbance and PTS, means that TTS as a measure is scoped out from further assessment”.

3.9.6 The MMO does not agree that TTS should be scoped out from further assessment. TTS has been quantified extensively for several marine mammal species, including harbour porpoise (e.g. Lucke et al., 2009; Kastelein et al., 2012b, 2013), bottlenose dolphin (e.g. Finneran & Schlundt, 2010, 2013), and harbour seal (e.g. Kastak et al., 1999; Kastelein et al., 2012a). This is not the case for PTS (though see Kastak et al., 2008), levels for which are extrapolated from TTS studies (Southall et al., 2007; National Marine Fisheries Service, 2016). There is therefore better evidence and less uncertainty in the assessment of TTS than in the assessment of PTS.

3.9.7 TTS constitutes a temporary reduction in the sensitivity of the auditory system, which for cetaceans is the primary sensory modality. Temporary impairment of this cognitive function could have serious consequences for individuals, which rely on sound for foraging, navigation, and communication. Periods of TTS may bring heightened vulnerability to predation, and the risk of missed opportunities for foraging and conspecific interactions.

3.9.8 In this way, the characteristics of TTS are distinct from behavioural disturbance, in which an animal changes its behaviour in response to a stimulus. There is no cognitive impairment implicit in behavioural responses. Furthermore, compared to TTS and PTS assessment, there is greater uncertainty in the assessment of the risk of behavioural disturbance, since these responses do not appear to scale with the noise levels received by marine mammals (Gomez et al., 2016). In contrast, the best experimental studies available to support noise impact assessments are the TTS studies cited above.

3.9.9 If TTS is excluded from underwater noise assessments, this risk of cognitive impairment will not be reflected in the overall assessment of risk to marine mammals, despite there being the strongest evidence to support such assessment (compared to PTS and disturbance), and the clear potential for significant harm to individual marine mammals.

3.9.10 On the question of the significance of TTS for individuals and populations, this is no different than the same question for PTS, except in the scale of severity – an animal

has its primary sensory modality impaired for a temporary period, rather than permanently.

3.9.11 Although TTS is by definition both recoverable and temporary, it is nevertheless an injury to the sensory capability of the animal which has the potential for serious consequences. As Kastelein et al. (2012b) put it:

“the course of recovery and time taken to recover from a TTS depend on the sound an animal was exposed to and the amount of shift incurred. Generally, the greater the TTS, the longer the recovery period (Carder and Miller, 1972; Mills et al., 1979). Reduced hearing sensitivity during the recovery period may have ecological consequences. The magnitude of the consequence is likely to be related to the duration and magnitude of the TTS”

3.9.12 For these reasons, The MMO believes TTS should be included in noise assessments, in addition to assessment of the risk of PTS and disturbance. At the very least, assessments should provide an indication of the predicted number of animals that are at risk of TTS.

3.9.13 The second impact proposed to be scoped out from further assessment is ‘other project related noise (e.g. cable laying, ground clearance, dredging etc.)’. The justification for scoping this impact out is provided in paragraph 5.7.30 of the report:

“The assessment of underwater noise is focused on those activities resulting in the most underwater noise. However, it is acknowledged that other project related activities are anticipated to result in some level of underwater noise. Such activities may include cable laying, ground clearance etc. However, the potential for underwater noise to be generated during these activities is low in terms of intensity and duration, with a very localised risk. That potential for risk is contained within the ‘vessel disturbance’ activity and ZOI and therefore considered as part of that impact measure. There is therefore no need to assess the same impact twice, and noise resulting from these activities are scoped out from further assessment.”

3.9.14 The MMO appreciates that the risk from other construction noise such as cable laying and dredging generally presents a lower risk to marine mammals than the likes of percussive piling or UXO detonation activities, for example. However, we would expect all primary noise sources (including cable laying and dredging) to be scoped in to the noise assessment and considered. One of the factors in determining the risk of potential impact from various sources such as dredging is the duration of the activity (in a 24-hour period). At this stage of the assessment, there are not enough details of the activities to confidently scope out such impacts.

3.9.15 Chapter 5.7 Marine Mammals highlights that a number of embedded mitigation measures for marine mammals are proposed and have been considered at the scoping stage, please see Table 5.7.2. These measures will evolve over the development process.

3.9.16 The MMO welcomes the inclusion of a Marine Mammal Mitigation Plan (MMMP) which will be implemented during construction and will be developed in accordance with JNCC (2010) guidance. The piling MMMP will include details of the soft start procedures to be used (see ID C-52 in Table 5.7.2).

- 3.9.17 In addition to this a further UXO MMMP will be implemented to manage the risk of Permanent Threshold Shift (PTS) from UXO clearance (see ID C-102 in Table 5.7.2). As stated above the MMO believes that the risk of instantaneous Temporary Threshold Shift (TTS) is also considered.
- 3.9.18 The MMO notes that the most direct and comprehensive way to mitigate the risk of acoustic impact on marine species is to reduce the amount of noise pollution emitted at source (noise abatement). For pile driving, there are now noise reduction technologies available, such as big bubble curtains and acoustic barriers that are integrated into the piling rig (e.g. IHC Noise Mitigation System), which are being routinely deployed in German waters (see Merchant, 2019). The MMO recommends that noise abatement measures are considered as the primary means of reducing the potential acoustic impact of pile driving operations. The MMO notes that noise abatement may not be the only mitigation proposed or indeed possible due to the variable requirements of the technologies available.
- 3.9.19 The MMO believes the EIA should include noise modelling to be undertaken to assess the reduction in PTS/TTS zones that applying noise abatement measures will bring. Further steps on this are provided in Faulkner et al. (2018), and, on noise abatement, in Merchant (2019) and the report of the recent workshop at the Royal Society (Merchant and Robinson, 2020). AS once these zones have been determined, this would then allow a better assessment of whether Acoustic Deterrent Devices (ADDs) are required, and if so, the required duration. As highlighted in Faulkner et al. (2018), if animals are displaced from ADDs, the extent of marine mammal displacement may exceed the range of displacement from the activity itself if noise abatement measures are applied (Dähne et al., 2017). The MMO welcomes further discussion through the EPP.

3.10 Seascape / Landscape

- 3.10.1 The MMO defers to Historic England, Natural England (as the SNCB) and relevant local planning authorities on the suitability of the scope of the assessment with regards to Seascape and Landscape.

3.11 Archaeology / Cultural Heritage

- 3.11.1 The MMO defers to Historic England on the suitability of the scope of the assessment with regards to Archaeology and Cultural Heritage impacts.

3.12 Navigation / Other Users of the Sea

- 3.12.1 The MMO defers to the Maritime Coastguard Agency (MCA) and Trinity House on the suitability of the scope of the assessment with regards to navigation of vessels.

3.13 Water Quality

- 3.13.1 The MMO defers to The Environment Agency on the suitability of the scope of the assessment with regards to water quality.

3.14 Dredging and Disposal

- 3.14.1 RED may need to potentially dredge and dispose of drill arising's from the preparation and installation of foundations or the clearance of sand waves under construction activities. The report does not note the assessment required to consider potential impacts from the proposed dredge and disposal. This should be addressed explicitly

in the final project design if this activity is to be undertaken. The scoping report should discuss the possible dredging and disposal methods, the disposal locations and whether local data is already available or will need to be collected.

3.14.2 Seabed preparation, dredging and disposal of material arising from the installation of infrastructure are licensable activities and disposals are only permissible within designated disposal sites. Should on-site disposal be required, a new disposal site or the use of an existing disposal sites must be characterised. A sign-posted characterisation report or EIA report chapter should be including as a minimum:

- The need for the new disposal site;
- The dredged material characteristics;
- The disposal site characteristics;
- The assessment of potential effects; and
- The reasons for the site selection.

3.14.3 If dredge disposal is required, a disposal method should be provided including the estimated volume of material to be disposed of. This must be provided in order to make an assessment of the proposed activity and to allow the proposed volumes to be included on any Development Consent Order.

3.14.4 RED have advised that further sediment contaminant surveys may be required. The MMO can provide further comment on this issue once more detail on disposal activities is provided.

3.15 Population and Human Health

3.15.1 The MMO defers to the Local Authority and Public Health England on the suitability of the scope of the assessment with regards to population and human health impacts.


3.16 Cumulative Impacts & In-Combination Impacts

3.16.1 The MMO is content with the proposal for cumulative impacts and in-combination impacts.

4. Conclusion

The topics highlighted in this scoping opinion should be assessed during the EIA process and the outcome of these assessments should be documented in the EIA report in support of the deemed marine licence application and the planning application. This statement, however, should not necessarily be seen as a definitive list of all EIA (and HRA) requirements. Given the scale and program of these planned works, other work may prove necessary.

Yours Sincerely



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4 August 2020

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11.

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion 2 Offshore Wind Farm (the Proposed Development).

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested.

Thank you for consulting the Ministry of Defence (MOD) on the above Scoping Opinion request in respect of the Rampion 2 Offshore Wind Farm proposal received by this office on 6th July 2020. I write to confirm the safeguarding position of the MOD on the information that should be provided in the Environmental Statement to support any application.

The MOD has completed this assessment using the provided Rochdale Envelope co-ordinates and, on the basis that the development will consist of up to 116 wind turbines at the maximum height of 325 metres to blade tip.

The applicant has prepared a Scoping Report. This recognises the principal defence issues that will be of relevance to the progression of the proposed development.

Section 5.12 Civil and Military Aviation of the Scoping Report identifies that defence activities including MOD aerodromes, radars and Danger Areas will need to be taken into account and addressed. The Scoping Report considers aviation and radar systems that could be affected by the proposed wind farm. The report states that initial radar modelling indicates no military airfields will be affected by Rampion 2. We have reviewed the development against current operational assets and requirements and this proposed development will have no impact on military Air Traffic Control or Air Defence Radars.

The report also identifies that the turbines have the potential to impact on military training. It is identified in the report that immediately to the west of Rampion 2 are the Portsmouth military Danger Areas, the closest of which to the proposed development is D037. Within this Danger Area the Navy conduct exercises using Ships and undertake Rotary and Fixed Wing flying down to surface level and the exercises involve explosives, para dropping and target towing.

At 5.12.21 (*Aviation baseline*) the proposed wind farm is described as being just to the east of D037 however, the MOD assesses that the development would overlap the Danger Area boundary for D037 and therefore could impact on Military training. The MOD would have concerns with any turbines or structures being erected in Danger Area D037 as they would impact on the Navy's freedom to exercise within the Danger Area and cause physical obstructions.

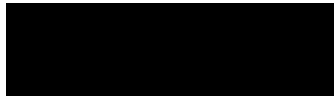
The report considers the requirement for aviation obstruction lighting and states that the development will comply with the legal requirements with regards to aviation marking and lighting. In the interests of air safety, the MOD would request that the development be fitted with MOD accredited aviation safety lighting in accordance with the Civil Aviation Authority, Air Navigation Order 2016.

In relation to the onshore element of the proposed development, the extent of the corridor which will contain the onshore cable route is included in the Scoping Report (Figure 1.1 *Scoping Boundary*). The corridor proposed does not occupy any MOD Land Parcels or MOD statutory safeguarding zones. I can confirm that the MOD does not have any concerns, but we would need to be consulted should the applicant decide to route the cable across or go near any MOD land parcel.

MOD Safeguarding wishes to be consulted and notified about the progression of this proposal and any subsequent application(s) that may be submitted relating to it to verify that it will not adversely affect defence interests.

I trust this is clear however should you have any questions please do not hesitate to contact me.

Yours faithfully

A black rectangular box redacting the signature of Teena Oulaghan.

Teena Oulaghan
Safeguarding Manager

Kent, Richard

From: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Sent: 21 July 2020 12:29
To: Rampion2; Wilkinson, Karen
Cc: NATS Safeguarding
Subject: RE: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation (SG25314) OBJECTION
Attachments: SG25314 TOPA Issue 2.pdf

Dear Karen

We refer to the application above. The proposed development has been examined by our technical safeguarding teams and conflicts with our safeguarding criteria.

Accordingly, NATS (En Route) plc **objects to the proposal**. The reasons for NATS's objection are outlined in the attached report TOPA SG25314 Issue 2.

We would like to take this opportunity to draw your attention to the legal obligation of local authorities to consult NATS before granting planning permission for a wind farm. The obligation to consult arises in respect of certain applications that would affect a technical site operated by or on behalf of NATS (such sites being identified by safeguarding plans that are issued to local planning authorities).

In the event that any recommendations made by NATS are not accepted, local authorities are obliged to follow the relevant directions within Planning Circular 2 2003 - Scottish Planning Series: Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003 or Annex 1 - The Town And Country Planning (Safeguarded Aerodromes, Technical Sites And Military Explosives Storage Areas) Direction 2002.

These directions require that the planning authority notify both NATS and the Civil Aviation Authority ("CAA") of their intention. As this further notification is intended to allow the CAA to consider whether further scrutiny is required, the notification should be provided prior to any granting of permission.

It should also be noted that the failure to consult NATS, or to take into account NATS's comments when determining a planning application, could cause serious safety risks for air traffic.

Should you have any queries please contact us using the details below.

Yours faithfully



NATS Safeguarding

E: natssafeguarding@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

From: Rampion2 <Rampion2@planninginspectorate.gov.uk>
Sent: 06 July 2020 11:57
Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Dear Sir/Madam

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020 and is a statutory requirement that cannot be extended.

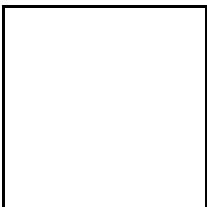
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Please note my working days are Monday, Thursday and Friday.

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

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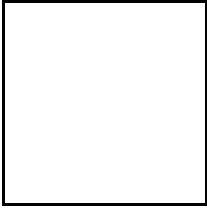


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Prepared by:

NATS Safeguarding Office

Unmarked



For Rampion 2 Offshore
Wind Farm Development

NATS ref: SG25314

LPA ref: EN010117

Issue 2

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Publication History

Issue	Month/Year	Change Requests and summary
1	January 2018	Pre-planning application
2	July 2020	Pre-planning application – revised turbine locations

Document Use

External use: Yes

Referenced Documents

1. Background

1.1. En-route Consultation

NATS en-route plc is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of RADAR's, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility NATS is a statutory consultee for all wind farm applications, and as such assesses the potential impact of every proposed development in the UK.

The technical assessment sections of this document define the assessments carried out against the development proposed in section 3.

2. Scope

This report provides NATS En-Route plc's view on the proposed application in respect of the impact upon its own operations and in respect of the application details contained within this report.

Where an impact is also anticipated on users of a shared asset (e.g. a NATS RADAR used by airports or other customers), additional relevant information may be included for information only. While an endeavour is made to give an insight in respect of any impact on other aviation stakeholders, it should be noted that this is outside of NATS' statutory obligations and that any engagement in respect of planning objections or mitigation should be had with the relevant stakeholder, although NATS as the asset owner may assist where possible.

3. Application Details

The Planning Inspectorate submitted a request for a NATS technical and operational assessment (TOPA) for the development at Rampion 2 Offshore Wind Farm. It will comprise turbines as defined in the EIA Scoping Report.

4. Assessments Required

4.1. En-route RADAR Technical Assessment

4.1.1. Predicted Impact on Pease Pottage RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the terrain screening available will not adequately attenuate the signal, and therefore this development is likely to cause false primary plots to be generated. A reduction in the RADAR’s probability of detection, for real aircraft, is also anticipated.

4.1.2. En-route operational assessment of RADAR impact

Where an assessment reveals a technical impact on a specific NATS’ RADAR, the users of that RADAR are consulted to ascertain whether the anticipated impact is acceptable to their operations or not.

Unit or role	Comment
London Area Control Centre ATC	Unacceptable
London Terminal Control Centre ATC	Unacceptable

Note: The technical impact, as detailed above, has also been passed to non-NATS users of the affected RADAR, this may have included other planning consultees such as the MOD or other airports. Should these users consider the impact to be unacceptable it is expected that they will contact the planning authority directly to raise their concerns.

4.2. En-route Navigational Aid Assessment

4.2.1. Predicted Impact on Navigation Aids

No impact is anticipated on NATS’ navigation aids.

4.3. En-route Radio Communication Assessment

4.3.1. Predicted Impact on the Radio Communications Infrastructure

No impact is anticipated on NATS’ radio communications infrastructure.

5. Conclusions

5.1. En-route Consultation

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, this has been deemed to be unacceptable.

Appendix A – Background RADAR Theory

Primary RADAR False Plots

When RADAR transmits a pulse of energy with a power of P_t the power density, P , at a range of r is given by the equation:

$$P = \frac{G_t P_t}{4\pi r^2}$$

Where G_t is the gain of the RADAR's antenna in the direction in question.

If an object at this point in space has a RADAR cross section of σ , this can be treated as if the object re-radiates the pulse with a gain of σ and therefore the power density of the reflected signal at the RADAR is given by the equation:

$$P_a = \frac{\sigma P}{4\pi r^2} = \frac{\sigma G_t P_t}{(4\pi)^2 r^4}$$

The RADAR's ability to collect this power and feed it to its receiver is a function of its antenna's effective area, A_e , and is given by the equation:

$$P_r = P_a A_e = \frac{P_a G_r \lambda^2}{4\pi} = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4}$$

Where G_r is the RADAR antenna's receive gain in the direction of the object and λ is the RADAR's wavelength.

In a real world environment this equation must be augmented to include losses due to a variety of factors both internal to the RADAR system as well as external losses due to terrain and atmospheric absorption.

For simplicity these losses are generally combined in a single variable L .

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4 L}$$

Secondary RADAR Reflections

When modelling the impact on SSR the probability that an indirect signal reflected from a wind turbine has the signal strength to be confused for a real interrogation or reply can be determined from a similar equation:

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r_t^2 r_r^2 L}$$

Where r_t and r_r are the range from RADAR-to-turbine and turbine-to-aircraft respectively. This equation can be rearranged to give the radius from the turbine within which an aircraft must be for reflections to become a problem.

$$r_r = \sqrt{\frac{\lambda^2}{(4\pi)^3}} \sqrt{\frac{\sigma G_t G_r P_t}{r_t^2 P_r L}}$$

Shadowing

When turbines lie directly between a RADAR and an aircraft not only do they have the potential to absorb or deflect, enough power such that the signal is of insufficient level to be detected on arrival.

It is also possible that azimuth determination, whether this done via sliding window or monopulse, can be distorted giving rise to inaccurate position reporting.

Terrain and Propagation Modelling

All terrain and propagation modelling is carried out by a software tool called ICS Telecom (version 11.1.7). All calculations of propagation losses are carried out with ICS Telecom configured to use the ITU-R 526 propagation model.

Date: 04 August 2020
Our ref: 321602
Your ref: EN010117-000006



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BY EMAIL ONLY

Dear Mr Kent,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion2 Offshore Wind Farm (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for your letter dated 6 July 2020 consulting Natural England on the Rampion 2 Offshore Wind Farm Environmental Impact Assessment Scoping Report. The following constitutes Natural England's formal statutory response, however, this is without prejudice to any comments we may wish to make in light of further submissions or on the presentation of additional information.

1. Background

It is important to note that many of the issues pertinent to this application are likely to be similar to those raised in relation to the Rampion Offshore Wind Farm Environmental Impact Assessments (EIA) and Environmental Statements (ES). We therefore strongly advise that in assessing the environmental impacts of the proposed project, due consideration is given to both lessons learnt from the project and Statutory Nature Conservation Body (SNCB) advice that has been provided in relation to these developments and associated environmental impacts.

2. The Scale of the Proposed Development

It is not clear to Natural England from the scoping report what is actually being proposed under the umbrella of the 'Rampion 2 Offshore Wind farm' NSIP project. We believe that the extension to the original project under the 2017 extension round will have a capacity of 400MW (equivalent to the original Rampion project) and be located to the west of this project. And in addition there is also being proposed a further Round 3 project known as Rampion 2 located to the south and east of the original project, which will have a capacity of 800MW. The combined capacity of these two projects is 1200MW which would quadruple the scale of the existing project capacity. Therefore given the potential significant issues NE has raised as part of this scoping document and the issues we previously raised in relation to Rampion 1 we advise that there is a risk that the scale of the proposed combined development maybe beyond what could be considered acceptable. Therefore we strongly advise each individual project i.e. extension and Rampion 2 are assessed individually and combined to provide consenting options for decision makers.

3. Pre-Application Consultation

Natural England recognises the importance of the pre-application stage of the PINS consenting regime and as such seek to make this process as effective as possible. The applicant has begun to engage in initial discussions with Natural England and is planning to initiate the Evidence Plan process alongside this scoping report, through which we will be an active participant.

Natural England recognises that the timeframe for this project places constraints on pre-application process. However, insufficient time to deal with key environmental concerns prior to submission of the application poses a risk to the development and we encourage the developer to allow sufficient time within the Evidence Plan Process to address them.

4. General Approach to EIA

It is relevant at this point to clarify the aims of EIA, in order to frame our advice on how it should be undertaken appropriately. EIA is a statutory process which should highlight the potential positive and negative impacts of a project, and identify how effects can be prevented, offset or reduced through mitigation, enabling the regulator to make a decision on whether to consent. In respect of offshore wind farm development, it is important to highlight the much larger scale and geographic spread of newer developments compared to earlier rounds of development. Therefore, while lessons are being learned from earlier rounds, there is the potential for a different range and/or a greater level of impacts to arise from upcoming developments particularly in relation to cumulative impacts. Consequently, considering the levels of uncertainty that this introduces to the EIA process we advise that the EIA is undertaken in the context of risk management. We identify the need to consider what level of confidence in the data it will be realistically possible to achieve, and how this will be presented to enable conclusions to be reached. The applicant should, therefore, be able to communicate in their ES, the confidence in their predictions on potential impacts, applying the lessons learned from previous rounds to inform this.

5. Scoping Opinion

We recognise that it is a statutory requirement for developers to undertake consultation on a Scoping Report. On review of the report submitted by the Applicant pertaining to Rampion 2, we have provided some overarching comments on the approach to EIA within this section, along with detailed comments on the report itself in the Annexes.

High-level Commitment Register

The applicant has used a Commitment Register to identify measures which may mitigate for potential impacts. However, a number of these commitments are broad in nature, and/or are reliant on site-specific considerations which are not yet known. Several of the Commitments are caveated with phrases such as 'where practical' and 'where possible' or are dependent on additional assessments. If it is not yet clear if a commitment is deliverable, then the worst case scenario needs to be scoped in to the assessment. We recognise that these commitments will become more detailed and will be confirmed as the project evolves, and therefore can usefully inform DCO/DML conditions. We do however question whether at this early stage this approach is helpful for aiding realistic, evidence based scoping decisions.

Treatment of mitigation

The report states that as part of the Rampion 2 design process, a number of embedded measures are proposed to reduce the potential for impacts and these are used to support decisions to 'scope out issues'. The developer suggests there is a commitment to implement these environmental measures, and also to various standard sectoral practices and procedures, so they are considered inherently part of the design of Rampion 2 and have, therefore, been considered in the scoping assessment and in some cases scoped out.

It is accepted as good EIA practice to identify significant effect of impacts in the absence of any mitigation, and any residual impacts following mitigation. These are important elements needed to accurately assess the likely effectiveness of the mitigation proposed and are particularly important when considering cumulative impacts.

Within this scoping report the determination of magnitude and therefore significance assumes the implementation of mitigation measures, and assumes that they will be effective at reducing the impact. Natural England note that in the absence of an assessment there is a potential for environmental impacts to be underestimated if issues are scoped out prematurely. Natural England therefore advises that where mitigation is required, the issue is scoped in to the ES, and the applicability and suitability of the mitigation measure explored in a simple assessment.

Simple vs. detailed assessments

The scoping report takes a tiered approach to the assessments likely to be required to inform the ES. Whilst we recognise that this will be an iterative approach, we do not consider that this broad distinction adds great value to the scoping report, given the early stage in the Evidence Plan process, when detailed discussions of the most appropriate methodology may not yet have been carried out.

Approach to inter-related and cumulative effects

Where an issue has been scoped out of the ES, it will still need to be considered as part of the interrelated effects, so that consideration can be given to any additive or synergistic impacts arising from the different effects of the proposal.

The methodology used to determine which impacts could result in cumulative impacts with other plans or projects for each chapter is unclear. All impacts that are scoped in to the assessment of the project alone should also be considered in the cumulative assessment.

Natural England highlights the requirement for the cumulative impact assessment to include a detailed consideration of cumulative effects with Rampion 1, as well as all other relevant developments.

The developer has stated that the decommissioning of Rampion 2 is considered to be too far into the future for any meaningful consideration of cumulative effects with other developments, and will therefore not be addressed. Natural England however do expect a commitment to the consideration of cumulative effects prior to decommissioning taking place.

6. Section 42: Preliminary Environmental Information Report (PEIR)

It is the view of Natural England that the most appropriate form for a PEIR to adopt is that of a draft Environmental Statement (ES). This would reassure Natural England and other key stakeholders, that the Applicant's approach to EIA is appropriate and to allow time for areas of concern to be raised and resolved prior to submission of the final ES to PINS. It is, therefore, sensible to maximise the opportunities in pre-application for open and constructive dialogue, to reduce the risk of an application being rejected by PINS. It is also our experience that if too many issues are left unresolved at application then this causes increased pressure for all involved during the Examination process. As such we would expect an emphasis on effective pre-application engagement between the developer and Natural England and the PEIR to present sufficient detail such that an assessment of the Applicant's approach to EIA can be made.

7. Habitats Regulations Assessment (HRA)

In accordance with the 2017 Habitats Regulations 63 (2) and 2017 Offshore Habitat Regulations anyone applying for development consent for an NSIP must provide the competent authority with such information as may reasonably be required "for the purposes of the assessment" or "to enable them to determine whether an appropriate assessment is required". NE advise that this information should therefore be provided and appraised as part of the EIA process.

8. Further Liaison and Advice

Rampion 2 Offshore Wind Farm lies in close proximity to other offshore windfarms. As such, we strongly advise that EIA assessments must provide a robust in-combination assessment of impacts. In addition to this, the further development of offshore wind farms presents an opportunity to learn from previous development and to further refine survey and monitoring methods to ensure that the practicality and effectiveness of methods employed means that key data gaps are addressed. There is, therefore, a role for consenting authorities, developers and consultees to increase the understanding of the effects of offshore wind farms as well as securing best practice in further developments. Natural England emphasises the importance of incorporating the experience of constructed windfarms in consideration of the feasibility of the design parameters and in the understanding of impacts. We would suggest the developer documents all of the lessons learnt in relation to Rampion 1, as well as other comparable windfarm developments and demonstrates how these have been taken into consideration in relation to the proposals for Rampion 2.

If you have any questions regarding the above comments or want to discuss further any of the issues we have raised please do not hesitate to contact Natural England on the details provided below.

Yours sincerely

Emma Preston
Marine Lead Advisor – Sussex and Kent Team
E-mail: emma.preston@naturalengland.org.uk
Telephone: 02080266555

Annex 1: The Proposed Development

Section	Comment
General Comment (Figure 1.1)	Natural England has repeatedly encouraged the applicant to share their plans in relation to the cable route with us as early as possible in the process. This approach is in line with Principle 4 of the Cable Route Protocol produced by the Crown Estate in relation to the 2017 Offshore Wind Extensions Plan, which states 'Planning of cable routes should be undertaken in close consultation with SNCBs....consultation should continue from the earliest stages of route planning to consent application. The developer has not been forthcoming with information on this and we have only recently become aware of their proposed cable route scoping boundary. This location has not been selected in close consultation with Natural England. The developer has not yet discussed the key environmental sensitivities of the offshore route with us or suggested how they might avoid impacts.
General Comment (page 63)	Natural England advises that a minimum of the target offshore cable burial depth of 1m be achieved. We note the developer has suggested the depth of burial is dependent on a cable burial risk assessment. A thorough consideration should be given to carrying out a realistic assessment as to how cables will be buried and what level of protection will be needed where cables cannot be buried. Cable crossings, mobile areas of seabed and harder substrates have all presented issues for cable burial and remedial works in other wind farms. From previous experience cable protection is may be required in other areas where optimum burial depth cannot be achieved. Natural England has requested that the lesson learnt from Rampion 1 are documented. Examination within this document of the cable burial depth that was able to be achieved previously would help to inform the achievability of a 1m burial depth as part of Rampion 2.
General Comment (page 65)	Natural England understand that the type of wind turbine foundation will be determined from the results of geotechnical investigations, existing environmental sensitivities and final WTG selection. We note it is anticipated that more than one type of foundation may be used across Rampion 2 and scour protection material may be required around some or all foundations. Natural England would support the use of foundations that require little or no scour protection to minimise the environmental impact of the footprint on the seabed.
General Comment (page 65/69)	<p>Natural England support the production of a Scour Management Plan, which will included the details of the need, type, quantity and installation methods for scour protection and this will be agreed with the relevant stakeholders. Natural England would welcome early discussions on scour protection with the applicant as they are developing this part of their plans.</p> <p>Natural England would like to see a clear description and assessment of the pros and cons of the scour and cable protection methodologies considered to ensure we achieve the best environmental option. Any assessment should clearly present the full and realistic extent scour protection required across the whole development. This will be needed to establish a realistic worst case scenario against which impacts from such activities can be assessed. Until this information is known it will not be possible to fully assess potential impacts on benthic ecology and coastal processes. The applicant should consider lessons learned from other offshore wind farms in relation to the requirement for cable protection.</p>
General Comment (page	Natural England note that some form of seabed preparation may be required and would support project design that minimises the required for this. Seabed preparation which may include seabed levelling, ground reinforcement and removing surface and subsurface debris. Boulder and UXO removal is also mentioned. A clear and realistic assessment of these activities should be

65/68)	conducted and considered within the Environmental statement. The potential impacts of these activities should be included in the benthic ecology and coastal processes sections.
General Comment (page 68/69)	It is anticipated cables will be installed via either ploughing, jetting, trenching, or post-lay burial techniques. . Natural England advise that the applicant should assess the worst case scenario in relation to the cable techniques that could be required and cable burial not being possible. The applicant should consider lessons learned from Rampion 1 and other offshore wind farms in relation to these issues.
General Comment (page 69)	Natural England would welcome early engagement on the exact routing of the export cables within the cable corridor, as this is examined during the detailed design of Rampion 2. Any route chosen should fully consider any environmental sensitivities.
General Comment (page 69)	The potential landfall site is identified as Climping in West Sussex. Natural England are aware of ongoing discussions relating to potential roll back at the site. Therefore any new infrastructure at this site should be placed as far landward as possible and the cable route should take into account possible future roll back plans. The following link shows some of the options currently being considered: https://climpingbeach.com/sea-defence-proposals
General Comment (page 75)	In relation to the decommissioning of Rampion 2 it is unclear whether the removal of all offshore infrastructure above the seabed includes the removal of scour and cable protection. Consideration should be given to using protection that can be recovered on decommissioning. Our previous experience with other Offshore Windfarm projects has shown that scour and cable protection have proven to be very difficult to retrieve from the seafloor, therefore the worst case scenario is that these will be left in situ and as such a clear quantification will need to be provided and the impacts assessed beyond the lifetime of Rampion 2. Although Natural England appreciates that a definite decommissioning plan is not to be delineated at this stage, the scoping report is anticipating the potential use of scour and cable protection throughout the project and as such consideration should be given to the likelihood of scour/cable protection being removed or left in situ.

Annex 2: Offshore

Section	Comment
Section 5.2 – Coastal Processes	
General Comment	The report suggests that scour protection may need to be installed. The worst case scenario in terms of the amount of scour protection required over the whole development will need to be assessed in relation to its potential impacts on coastal processes and coastal process receptors.
General Comment	The potential impacts to Climping Beach SSSI should be considered, for example in relation to changes to landfall morphology.
General Comment	Further detail on construction activities on landfall should also be provided for example the size and location of exit pits, if a cofferdam will be needed, and details around intertidal access since these activities might interfere with sediment transport along the coast and within the nearshore environment.
	The report suggests seabed preparation which may include seabed levelling, ground reinforcement and removing surface and subsurface debris. This would include boulder clearance. The potential impacts of these activities on coastal process should be considered.
5.2.33	Natural England is unclear of the rationale behind the chosen potentially sensitive coastal processes receptors. The adjacent coastlines (between Selsey Bill and Beachy Head) have been listed as a coastal processes receptor, but the SSSI's along this coastline have not been list in this section or the nature conservation section. We note the applicant suggests that additional receptors may also need to be considered, as further data and information becomes available. However, we would expect to see a full list of designated sites that have the potential to be impacted considered at this stage.
Table 5.2.3	The assessment suggests no likely significant effect on coastal processes receptors, but that there is a potential pathway of effect for other aspects. Based on the fact that there is still further data required it would appear to be too early at this stage to rule out likely significant effects on the receptors identified.
Table 5.2.3	Natural England concurs that further data baseline requirements including updated geophysical surveys and sediment sampling, which covers the whole of the area relevant to Rampion 2, are needed. We would welcome consultation on the methodology for these surveys and highlight the requirement for the developer to provide sufficient up to date information in relation to their proposals.
5.2.43	Natural England acknowledge that the adjacent existing Rampion 1 project was consented based on several project specific studies, which included the use of numerical modelling to quantify the environmental baseline, and the scheme impacts on the physical processes and environment for the realistic Maximum Development Scenario options at the time. The developer states that because Rampion 2 is a broadly similar offshore wind farm development, in a similar environmental setting that it is unlikely that new project specific numerical modelling will be required to inform design scenario specific impact assessment for Rampion 2. Natural England recognises the potential applicability of these models, however we would need further justification of the applicability of these models to the Rampion 2 Project area and highlight the need for models to be tested with actual data that has since been collected. Without accurate quantification of the specific Rampion 2 scenario, it is unlikely to be possible to assess the significance of impacts of this new scheme and its combined impacts with Rampion 1 on coastal areas. Natural

	England's key area of interest relates to designated sites at the coast, we would therefore require sufficient information to be included in the Environmental Statement to confidently assess whether these will be impacted.
Section 5.4 – Fish and shellfish ecology	
Natural England recognise that CEFAS are the lead advisors with regards fish species. Natural England would like to confer with Cefas and the MMO in relation to their opinions on this section as part of the evidence plan process. However, we would like to make the following comments at this stage:	
Table 5.4.2	Natural England wishes to highlight that the Solent and Dorset Coast SPA was classified on the 16 January 2020, it should therefore no longer be referred to as a potential SPA in this report.
5.4.6	The developer suggests existing site specific data from the existing Rampion 1 project and its preconstruction surveys together with considerable wider studies within the region (as detailed in Table 5.4.1 and paragraph 5.4.18 <i>et seq.</i>) are considered sufficient in describing the fish and shellfish resource within the Rampion 2 study area for the purposes of undertaking an EIA, and they therefore, do not propose to undertake any additional fish or shellfish surveys. Natural England would assert that the existence of site specific data for Rampion 1, does not in itself diminish the need for up to date and site specific fish and shellfish surveys to be carried out to inform this new development.
5.4.7	The report suggests Geophysical survey data will be used where available to inform the likely location of black bream nesting areas. Elsewhere in the report it states Geophysical Survey Data covering 100 percent of the seabed within the development area is expected to be undertaken June / July 2020. Therefore this data set should be available to use after this further survey work has been carried out. We do however note that it is not clear in the report if this survey is likely to be delayed due to COVID-19.
5.4.32	The features for Beachy Head East MCZ and the Bembridge MCZ have not been included in the assessment, because they lie outside of the study area. Natural England would question the decision to exclude these sites at such an early stage, given that that 5.4.3 and 5.4.4 suggests the study area is yet to be finalised and is dependent on updated information, such as coastal process and noise modelling. We would suggest these sites are scoped in at this stage pending the findings of this additional work.
Table 5.4.4	Direct and indirect seabed disturbances leading to the release of sediment contaminants (Construction and Decommissioning), should not be scoped out without site specific data to justify that contamination levels are low. We note as part of the site specific benthic surveys sediment sampling will be done and these samples will be tested for contaminants. Once the results of these surveys are available this may be able to be scoped out at a later date dependant on the findings.
Table 5.4.4	Direct disturbance resulting from construction within the array is not considered to result in a likely significant effect on fish and shellfish receptors. We would question why this has not been scoped into the assessment as direct disturbance resulting from the installation of the export cable has been and then informed by the further analysis and surveys proposed.
Table 5.4.4	Natural England suggest that there is insufficient information to scope out direct disturbance resulting from maintenance within the array area and the offshore cable corridor during operation. Depending on the nature of the maintenance works and the species present in the area there could be a likely significant effect. Therefore a worst case scenario in relation to realistically anticipatable maintenance works based on the knowledge base being formed from existing wind farms should be considered.
Table 5.4.4 and 5.4.42	Accidental pollution events are currently scoped out based on embedded measures to reduce the likelihood of an incident. These included the implementation of a Project Environmental Monitoring Programme (PEMP) and Marine Pollution Contingency Plan

	(MPCP). Natural England advises that where such measures are considered necessary to mitigate against an impact the issue is scoped in to the ES, and the applicability and suitability of the mitigation measures is explored in a simple assessment.
Comments on specific species:	
Black seabream	<p>Kingmere Marine Conservation Zone (MCZ)</p> <p>Black seabream are a feature of Kingmere MCZ, which falls within the study area and lies adjacent to the scoping boundary. Black seabream have been assigned a recover target for population size and a restore target for nest abundance and distribution, as part on the supplementary advice on the conservation objectives for the site. Any negative impact from development on the MCZ would be in direct contravention to this advice.</p> <p>Black seabream are known to arrive and spawn in Kingmere in the spring months. Nests are built by adult males within the sediment and the males remain at the nest site guarding it from predators and keeping the eggs clear of sediment, until the eggs hatch. Black seabream require very specific nesting habitat: near horizontal bedrock with a thin layer of sediment. There is also some evidence that this species exhibits site fidelity (Sussex Inshore Fisheries and Conservation Authority (IFCA), 2016 https://secure.toolkitfiles.co.uk/clients/34087/sitedata/files/MPAs/Black-Bream-2016-public-tagging-update.pdf).</p> <p>The young tend to form a loose school around the nest for several weeks after hatching (Maitland and Herdson, 2009)¹ and juveniles remain in inshore waters for 2-3 years before recruiting to the adult stock (Pawson, 1995)².</p> <p>Natural England notes that both adult and juvenile black sea bream are known to be extremely audio-sensitive and therefore susceptible to noise pollution. Adult males guarding the nest are particularly vulnerable to disturbance. If disturbance leads to the adult being displaced from the nest this could also potentially leave the eggs venerable to predation.</p> <p>Natural England therefore supports mortality, injury, behavioral changes and auditory masking arising from noise and vibration (Construction and Decommissioning) being scoped into the assessment for Black seabream.</p>

¹ Maitland, P. S. and Herdson, D. 2009. Key to the Marine and Freshwater Fishes of Britain and Ireland, Environment Agency

² Pawson, M. G. 1995. Biogeographical identification of English Channel fish and shellfish stocks, Fisheries Research Technical Report (#99) Lowestoft: MAFF Direct Fisheries Research.

<p>Black seabream</p>	<p>Kingmere MCZ lies adjacent to the cable route lies adjacent to the proposed Rampion 2 offshore cable corridor. The developer has highlighted that they intend on purchasing License areas 453CEMEX UK Marine Ltd. (CMX) and 488 Tarmac Marine Ltd., Aggregate monitoring data (2017-2019), as part of the evidence base. This survey data indicates the best-known locations of nesting activity to date in and around the MCZ.</p> <p>Natural England are aware this data indicates Black seabream nesting sites within the cable corridor. Black seabream require very specific nesting habitat and therefore are localised to specific areas. Natural England would like to draw the applicants' attention to policy S-FISH-4 of the South Inshore and South Offshore Marine Plan. This policy states 'Proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impact on essential fish habitat, including, spawning, nursery, feeding grounds and migration routes'. Natural England therefore agrees with the decision to scope in direct disturbance resulting from the installation of the export cabled during both construction and decommissioning, as well as for long terms loss of habitat structural complexity due to the presence of cable protection in relation to Black seabream (operation). The potential for physical destruction of nesting habitat due to the cable trenching, maintenance or potential replacement of the cable and from the installation of scour protection either during construction or operation should also be considered. The applicant should in the first instance look to avoid direct impacts on nesting sites.</p>
<p>Seahorses</p>	<p>The report identifies both short snouted and spiny seahorses (<i>Hippocampus hippocampus</i>, <i>Hippocampus histrix</i>) are of conservation importance in UK waters. The spiny seahorse species found in English waters is <i>Hippocampus guttulatus</i>, rather than <i>Hippocampus histrix</i> as stated in the report.</p> <p>Beachy Head West MCZ, Selsey Bill and the Hounds MCZ, Bembridge MCZ, Beachy Head East MCZ</p> <p>Short-snouted seahorse are a feature Beachy Head West MCZ, and Selsey Bill and the Hounds MCZ, which lie within the study area. They are also a feature of Bembridge MCZ and Beachy Head East MCZ, which lie outside of the current study area. The potential for indirect effects on short-snouted seahorses within these MCZ's should be considered.</p> <p>These effects include:</p> <ul style="list-style-type: none"> • Mortality, injury, behavioural changes and auditory masking arising from noise and vibration • Changes in suspended sediment <p>Schedule 5 of the Wildlife and Countryside Act</p> <p>Short snouted seahorse (<i>Hippocampus hippocampus</i>) and Spiny seahorse (<i>Hippocampus guttulatus</i>) are protected species listed in Schedule 5 of the Wildlife and Countryside Act.</p> <p>The scoping report acknowledges that these seahorse are regularly recorded in the English Channel, with the study area also</p>

	<p>being a potential overwintering area for both seahorse species. Natural England are aware of records of seahorses in shallower waters within the study area, and therefore these areas and potential migratory routes to overwintering areas also need to be considered.</p> <p>Natural England would expect all unnecessary damage to be avoided, all reasonable steps taken to minimise impacts on these protected species and whatever possible mitigation put in place before the works commence. We therefore welcome seahorses being scoped in to the assessment for mortality, injury, behavioural changes and auditory masking arising from noise and vibration and agree that further site specific predictive noise modelling needs to be undertaken in order to understand the effect on this species. Natural England would advise the potential for seahorses outside of designed sites to be impacted by direct disturbance should be considered.</p>
Herring and Sandeel	<p>Herring and sandeel are the basis of many food chains. Their juveniles are of particular interest to the breeding tern population in order to feed their nesting young. Herring levels may indirectly influence breeding terns within nearby Special Protection Areas such as Pagham Harbour SPA, Chichester and Langstone Harbours SPA and the Dungeness, Romney Marsh and Rye Bay SPA.</p> <p>Relatively high concentrations of herring larvae and herring spawning activity occurs in the mid-English Channel (Ellis et al., 2010)³ along the French side of the median line. Sandeel data included in the scoping report suggest they spawn inside the scoping boundary. Natural England notes that it is possible that construction noise, particularly that pertaining to piling could adversely affect sandeel and herring spawning sites. It is possible that the spawning herring or sandeel may suffer a significant avoidance reaction by the majority of individuals which could in turn affect the success of the spawning event and the health of the species.</p> <p>Natural England are concerned that an impact on herring and sandeel populations could possibly have a knock on impact on the tern populations contained within SPA's. We therefore welcome herring and sandeel being scoped in to the assessment for mortality, injury, behavioural changes and auditory masking arising from noise and vibration and agree that further site specific predictive noise modelling needs to be undertaken in order to understand the effect on these species and in turn any indirect impacts on SPA bird populations.</p>

³ J. R. Ellis et al. 2010. MB5301 Mapping spawning and nursery areas of species to be considered in Marine Protected Areas (Marine Conservation Zones) Report No 1: Final Report on development of derived data layers for 40 mobile species considered to be of conservation importance.

Section 5.5 – Benthic and intertidal ecology	
General Comment	In relation to construction, consideration should be given to the potential impacts on benthic subtidal and intertidal ecology from construction methods such as the use of jack up barges and other installation vessels. Preference should be given in the first instance to methodologies that minimised damage to or loss of habitats.
General Comment	We recognise cable burial will be the preferred option for cable protection, but as previously mentioned the developer has suggested scour protection may be required in relation to cables and the array. Any assessment should clearly present the full and realistic extent scour protection required across the whole development. This will be needed to establish a realistic worst case scenario against which impacts from such activities on benthic ecology, particularly in relation to habitat loss can be considered.
General Comment	The cable installation methodology appears to still be very uncertain and a number of different techniques have been proposed for the installation of array and export cables. They could be installed via either ploughing, jetting, trenching, or post-lay burial techniques to a target burial depth of 1m below seabed surface. Natural England would welcome early discussions with the developer regarding the cable installation methodology as it progresses to ensure the possible impacts on benthic ecology are minimised. Lessons should be learnt from the original Rampion cable installation and a method needs to be found of bringing cables inshore in this area without the need for digging large flotation pits for vessels.
General Comment	Natural England note that significant chalk plumes were visible and persistent from cable installation at Rampion 1 Offshore Wind Farm and that the potential for similar effects should be considered as part of the detailed assessment suggested for suspended sediment and sediment deposition. We are aware that there are lessons to be learnt in relation to Rampion 1. Therefore consideration should be given by the developer at an early stage to ensure a methodology that seeks to minimise suspended sediments and direct impacts on the sea bed is produced and adhered to.
General Comment	The report suggests seabed preparation which may include seabed levelling, ground reinforcement and removing surface and subsurface debris may be necessary. This would include boulder clearance. A clear and realistic worst case scenario assessment of these activities should be included in relation to impacts on benthic ecology, including habitat loss. The potential impacts of these activities should be included in the benthic ecology and coastal processes sections.
General Comment	The applicant relies on data such as EU SeaMap Predicted Habitats as an indicator of the habitats present, particularly in the areas not previously surveyed. Natural England would advise this type of existing data does not replace the need for sufficient site specific survey data collection for the development area.
Table 5.5.2	Beachy Head East MCZ and the Bembridge MCZ have not been included in the nature designations that have been screened in for consideration to the benthic subtidal and intertidal ecology EIA. Natural England would question why these sites have not also been scoped into the assessment at this early stage, until additional modelling has been carried out. We would also suggest the applicant discusses with JNCC whether Offshore Brighton MCZ should be scoped in at this stage. The applicant should also consider whether there is a pathway for impacts on the features of any coastal SSSI's.
5.5.9 – 5.5.11	Natural England concurs that further information on the Rampion 2 benthic subtidal and intertidal ecology study area needs to be gathered through site-specific benthic ecology surveys which it is suggested in the report will be undertaken across the scoping boundary. We welcome the commitment to consult key stakeholders on the methodology for these surveys and would highlight the requirement for the developer to provide sufficient, up to date information in relation to their proposals.
5.5.26, 5.5.27 &	Habitats and Species Principal Importance

5.4.28	<p>The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as ‘Habitats and Species of Principal Importance’ within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available here https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity.</p> <p>Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, ‘are capable of being a material consideration...in the making of planning decisions’. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES.</p> <p>The developers must therefore ensure sufficient data is gathered to identify any actual areas of <i>Mytilus edulis</i> reef (also Annex 1 and OSPAR) and <i>Sabellaria spinulosa</i> reef (also Annex 1) within the Rampion 2 Scoping Boundary to successfully mitigate or microsite around extensive reefs.</p> <p>The report highlights that chalk reefs (also Annex 1) are known to occur through the study area. The developer should ensure sufficient data is gathered in relation to where subtidal chalk an is present and consideration should be given to minimising the loss of this feature, including mitigating impacts and micro-siting around extensive reefs. Lessons should be learnt from the original Rampion cable installation in relation to minimising the loss of chalk and effective mitigation. A method needs to be found of bringing cables inshore in this area without the need for digging large flotation pits for vessels.</p>
5.5.31, 5.5.32, Table 5.5.2	<p>In the first instance any route should look to avoid passing through Climping Beach Site of Specific Scientific Interest to avoid direct habitat loss. In addition to the designated features of the SSSI the developer identifies that Natural Environment and Rural Communities Act (2006) Section 41 Habitats of Principal importance run along the top of the shore including Coastal Vegetated Shingle and Coastal Sand Dunes. Sufficient data should be collected in order to quantify the extent and location of any of these habitats that might be lost as a result of the export cable and associated infrastructure. Consideration should be given to minimising the loss of these coastal habitats.</p>
Table 5.5.4	<p>The report assesses long-term habitat loss in relation to operation. It is possible long term habitat loss could also occur in the construction phase dependant on the methodology used and when the site is decommissioned. As mentioned previously in the overall comments, it is not yet clear if scour and cable protection will be left in situ at the decommissioning stage. Therefore the permanent impact of these structures should they not be retrievable should be considered.</p>
Table 5.5.4	<p>Accidental pollution events are currently scoped out based on embedded measures to reduce the likelihood of an incident. These included the implementation of a Project Environmental Monitoring Programme (PEMP) and Marine Pollution Contingency Plan (MPCP). Natural England advises that where such measures are considered necessary to mitigate against an impact the issue is scoped in to the ES, and the applicability and suitability of the mitigation measures is explored in a simple assessment.</p>

Section 5.7 – Marine Mammals	
5.7.5	Should the area in the extreme eastern extent of the scoping boundary be covered by future digital aerial surveys in relation to birds we would welcome it also being surveyed for marine mammals.
Figure 5.7.1	Natural England query as to why the cable corridor has not been included in marine mammal surveys.
5.7.10	Contingency measures for COVID-19 should be considered in the writing and implementing of the MMMP and the mitigation measures detailed therein.
Table 5.7.1	The Joint Cetacean Protocol (JCP) should also be utilised as a data sources for the marine mammal assessment.
5.7.28	Natural England consider TTS should not be completely scoped out of assessment. While Natural England agrees that the greatest risk to an animal is from physical or auditory injury, we do think that TTS is important to assess.
5.7.31	Natural England does not consider that reduction in prey availability can be scoped out from assessment. Whilst we follow the reasoning that if there is no significant impacts to fish and shellfish then there will not be any to marine mammals, there is insufficient information presented here to demonstrate that this is the case.
5.7.34	There is not sufficient information presented here to warrant disturbance to seals at haulout sites to be scoped out from further assessment. It is not only haul out sites in harbours that should be considered in the assessment but other potential haul out sites along the coast and their proximity to any cabling or landfall activities.
5.7.37	CEA – All impacts that are scoped in to assessment of the project alone should also be considered in the cumulative assessment.
Section 5.8 – Offshore ornithology	
5.8.5	Natural England notes, from paragraph 5.8.5, that zone 6 was added to the scope of the proposal after the digital aerial survey had been planned so a small part of the eastern area has not been covered. The bird abundance ‘heat maps’ presented in figures 5.8.3 – 5.8.6 show that this means the 4km buffer to the west has not been flown. This has implications, in particular, for the assessment of displacement of bird populations from the area. Will this omission be rectified for the 2020/21 surveys, or will the data gap be filled another way? Natural England seeks reassurance this will be considered.
Figure 5.8.1	Figure 5.8.1 presents relevant SPAs/Ramsar sites for the ornithological assessment. However, Natural England’s view is that impacts on the Alderney West Coast and the Burhou Islands Ramsar site should also be considered. Tracking studies of the gannets from this colony demonstrate that the foraging range overlaps with the scoping area ⁴ . Tracking studies have also shown that lesser black-backed gulls from the Alde-Ore Estuary SPA move through the area on passage; and seabirds from Flamborough & Filey Coast SPA may be present or transit through the application site in the non-breeding period, as may seabirds from other SPAs further north. Therefore, it will be important to consider potential impacts on these sites, particularly for the in combination with other planned and consented offshore windfarms.
5.8.14 to 5.8.15	As set out at paragraphs 5.8.14-15, the two key components of the ornithological impact assessment will be the collision risk analysis and displacement analysis. Natural England will work with the Applicant on the detail regarding this assessment through the Evidence Plan Process.
5.8.23	Paragraph 5.8.23 identifies the main species of interest for the offshore ornithology assessment based on the first year’s survey

⁴ See Wakefield et al (2013) Space partitioning without territoriality in gannets. Science. 31 (68-70). Also newer tracking data reported by the Alderney Wildlife Trust: <http://www.birdsontheedge.org/2016/07/04/tracking-alderneys-gannets-as-they-explore-the-channel/>

	results. Natural England expects that the species of interest for the full assessment should be those that are features of designated sites, as well as those found in the greatest abundance. For example, whilst kittiwakes were only found in high numbers in February 2020, a detailed consideration of potential impacts on that species will be necessary where they are a feature of relevant designated sites (as identified in our comments regarding figure 5.8.1 and table 5.11.3).
5.8.23	Paragraph 5.8.23 states the auk heat maps use on water estimates of abundance. Have these estimates been corrected for birds that spend time pursuit diving? Natural England recommends that the rationale for which correction factor has been used is presented, and both the corrected and uncorrected data should be provided in the assessment.
5.8.42	Paragraph 5.8.42 states that disturbance and displacement due to export cable maintenance has been scoped out. Natural England's view is that this is acceptable.
5.8.43	Paragraph 5.8.43 goes on to state that a barrier effect from the presence of the turbines has also been scoped out. Natural England would welcome further discussion with the applicant regarding screening for likely significant effects from the proposal in relation to the potential for a barrier effect. The English Channel is an important migratory route for a wide range of seabirds and waterbirds travelling to and from the Atlantic into the North Sea. Reference should be made to tracking studies before a likely significant effect to birds on migration is ruled out. We note that a potential barrier effect on birds whilst they are resident in a particular season will be included in the assessment of displacement.
Section 5.9 – Underwater Noise	
General Comment	The possible modelling of UXO is not mentioned in this section, although elsewhere in the report it mentions surveys to identify their existence and location have not yet been conducted and that UXO removal may be require. An assessment will be required to assess the impact of UXOs alone and in combination with other underwater noise producing activities.
General Comment	Any noise assessment should represent the worst case across both spatial and temporal scales.
General Comment	Consideration should be given to noise levels and timings with regards noise sensitive receptors including designated sites and protected species.
5.9.8 to 5.9.9	Natural England would agree that an underwater noise assessment, including noise propagation modelling, is considered likely to be required. The developer suggests the detailed scope, specification and methodology of the noise propagation modelling will be discussed and agreed with Statutory Nature Conservation Bodies (SNCBs) through the Evidence Plan Process and we welcome this approach.
Section 5.11 – Nature Conservation	
General Comments	Natural England does not hold local information on local sites, or local or national inclusion of these from the appropriate bodies (which may include the local records centre, the local wildlife trust, local geo conservation group or other recording society).
5.11.8	The developer anticipates that the current list of sites will be amended following consultation with relevant consultees and stakeholders, through the Evidence Plan Process. The developer suggests as further information on the proposals and the surveys conducted is made available it may be necessary to add or remove sites. We would suggest that a comprehensive list of all the sites, which could be directly or indirectly affected should be scoped in at this stage and that sites are only removed if there is sufficient evidence to justify this. If any sites are removed the reasons for this should be fully documented.
5.11.20	Natural England welcome a detailed review of Natura 2000 sites being undertaken in consultation with key stakeholders during the HRA Screening for Rampion 2.

5.11.21, Table 5.11.1	Natural England notes that Dungeness SAC, Hastings Cliffs SAC, Pevensey Levels SAC, Dungeness, Romney Marsh and Rye Bay Ramsar, are not in the list of sites scoped in to the assessment. If these sites have been considered and scoped out, then an explanation should be provided as to why this is.
5.11.21, Table 5.11.1	In accordance with the management unit scale study area described in the marine mammal section of the scoping report, the Southern North Sea SAC should be considered relevant to the proposed development as they are located within the same management unit and should therefore be included in section 5.11.21 and table 5.11.1
5.11.2	As noted previously, additional SPAs to those listed in table 5.11.2, which may be impacted in combination with other planned and consented offshore windfarms will need to be considered in the Habitats Regulations Assessment.
5.11.23	As noted previously, Natural England recommends that the Alderney West Coast and the Burhou Islands Ramsar site is added to the list of Ramsar sites in paragraph 5.11.23.
5.11.26, table 5.11.3	The rationale for selecting statutory national designations of relevance to the proposed development is unclear. The adjacent coastlines (between Selsey Bill and Beachy Head) have been listed as a coastal processes receptor, but the SSSI's along this coastline have not been included in the nature conservation section. Natural England would suggest a full review of the SSSI's included needs to be conducted, to ensure all the relevant sites have been included and considered in the assessment.
Table 5.11.3	Natural England recommends adding Seaford to Beachy Head SSSI and Brighton to Newhaven Cliffs SSSI to table 5.11.3. Kittiwakes are an important part of the breeding bird assemblage of Seaford to Beachy Head SSSI. They are a notified feature of Brighton to Newhaven Cliffs SSSI, though the colony has since moved to Seaford Head. Therefore, the favourable condition table for Brighton to Newhaven Cliffs suggests assessing the colonies of the two sites together (see https://designatedsites.naturalengland.org.uk/PDFsForWeb/FCT/fct_1003033_f.pdf).
Table 5.11.3	We would suggest the applicant discusses with JNCC whether Offshore Brighton MCZ should be scoped in at this stage
5.11.29 to 5.11.30	This section mentions UK Biodiversity Action Plan (BAP) habitats and species, but then only appears to consider impacts on designated sites. It is also unclear how the list of relevant BAP habitats and species was compiled, but there are some notable omissions including Native oysters, Blue mussel beds and <i>Sabellaria spinulosa</i> reefs. Direct and indirect impacts on such features should be considered across the relevant chapters. See further comments in relation to Blue mussel beds and <i>Sabellaria spinulosa</i> reefs in the benthic and intertidal ecology section.
Table 5.11.5	In the first instance any route should look to avoid passing through Climping Beach Site of Specific Scientific Interest to avoid direct habitat disturbance.
Table 5.11.5	Natural England agrees that Climping Beach SSSI should be scoped into the assessment in relation to direct impacts on its features. The applicant has suggested the scoping boundary will avoid internationally designated sites and all MCZs, including the Offshore Overfalls MCZ and the Kingmere MCZ. Therefore direct impact to other designated features (Construction, Maintenance and Decommissioning), has been scoped out. Natural England would suggest this decision is kept under review, until a more detailed cable route is available, particular as the scoping boundary touches the boundary of the aforementioned MCZ's. The applicant will still need to consider indirect impacts, such as noise, vibration and increased suspended sediment on these sites.

Annex 3 – Onshore

Section	Comment
General Comment	<p>The environmental statement should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (as amended). In addition paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.</p> <p>Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.</p> <p>Should a likely significant effect to European/internationally designated site(s) be identified or be uncertain, the competent authority may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.</p>
General Comment	<p>The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' (NPPF Para 174), which should be demonstrated through the ES.</p>
General Comment	<p>Rights of Way, Access land, Coastal access and National Trails</p> <p>The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the South Downs Way National Trail and the England Coastal Path. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.</p>
Section 6.3 – Air Quality	
General Comment	<p>Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition (England Biodiversity Strategy, Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced.</p>

	Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further information on air pollution modelling and assessment can be found on the Environment Agency website.
Section 6.4 - Soils and agriculture	
General Comment	<p>Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 170 of the NPPF. We also recommend that soils should be considered in the context of the sustainable use of land and the ecosystem services they provide as a natural resource, as also highlighted in paragraph 170 of the NPPF.</p> <p>Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.</p> <p>The applicant should consider the following issues as part of the Environmental Statement:</p> <ol style="list-style-type: none"> 1. The degree to which soils are going to be disturbed/harmed as part of this development and whether 'best and most versatile' agricultural land is involved. <p>This may require a detailed survey if one is not already available. For further information on the availability of existing agricultural land classification (ALC) information see www.magic.gov.uk. Natural England Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land also contains useful background information.</p> <ol style="list-style-type: none"> 2. If required, an agricultural land classification and soil survey of the land should be undertaken. This should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. 3. The Environmental Statement should provide details of how any adverse impacts on soils can be minimised. Further guidance is contained in the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites.
Section 6.6 Terrestrial ecology and nature conservation	
General Comment	Nationally designated sites have been identified within the scoping boundary. Natural England recommends that the environmental statement should fully explore options to avoid direct and indirect impacts to this nationally important sites in accordance with the requirements of Paragraph 175 of the NPPF. If impacts cannot be avoided, the options with the least impact should be fully explored. Such an approach is also in accordance with Section 5.3.11 of the Overarching National Policy Statement for Energy (EN-1) which states that:

	<p>'Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site¹⁰¹, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The IPC should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.'</p> <p>As well as Section 2.5.33 of the National Policy Statement for Renewable Energy Infrastructure (EN-3) which states that:</p> <p>'In sites with nationally recognised designations (Sites of Special Scientific Interest, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty and Registered Parks and Gardens), consent for renewable energy projects should only be granted where it can be demonstrated that the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits'.</p>
General Comment	<p>The environmental impact assessment will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. These sites are of county importance for wildlife or geodiversity.</p> <p>The environmental statement should include a full assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Detailed surveys for all of the interest features of the Local Wildlife Sites should inform the impact assessment.</p>
General Comment	<p>Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended).</p> <p>The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.</p> <p>The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.</p>

	In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted standing advice for protected species which includes links to guidance on survey and mitigation.
General Comment	<p>Habitats and Species of Principal Importance</p> <p>The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available here https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity.</p> <p>Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.</p> <p>Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:</p> <ul style="list-style-type: none"> • Any historical data for the site affected by the proposal (e.g. from previous surveys); • Additional surveys carried out as part of this proposal; • The habitats and species present; • The status of these habitats and species (e.g. whether priority species or habitat); • The direct and indirect effects of the development upon those habitats and species; • Full details of any mitigation or compensation that might be required. <p>The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain. The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of priority habitat for the area under consideration.</p> <p>Natural England strongly recommends that impacts on the priority habitats identified in Table 6.6.9 should be considered in detail. Where habitat loss cannot be avoided, the habitat should be reinstated after the completion of construction. The applicant should consider lessons learnt from Rampion 1 in relation to habitat reinstatement.</p>
General Comment	Ancient woodland is an irreplaceable resource of great importance for its wildlife, its history and the contribution it makes to our diverse landscapes. Those responsible for determining planning proposals have a vital role in ensuring its conservation, in

	<p>particular through the planning system. The environmental statement should have regard to the requirements under Section 5.3.14 of the Overarching National Policy Statement for Energy (EN-1) which states:</p> <p>'Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The IPC should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location¹⁰³ outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided¹⁰⁴. Where such trees would be affected by development proposals the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why.</p>
General Comment	<p>In addition to the any required mitigation and compensatory measures for impacts to biodiversity and geodiversity assets from Rampion 2 , Natural England recommends that the scheme should deliver a net benefit for biodiversity and the wider environment. Such enhancements should consider the terrestrial, aquatic and marine habitats and species. The environmental statement should fully detail the environmental enhancements that will be provided by the applicant.</p> <p>Natural England recommends that positive environmental outcomes should be delivered from major infrastructure developments. Nationally Significant Infrastructure Projects can make a significant contribution to delivering the environmental ambition in the Government's 25 Year Environment Plan. This aims to deliver an environmental net gain through development and infrastructure.</p> <p>Section 5.3.4 of the Overarching National Policy Statement for Energy (EN-1) states:</p> <p>'The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests'.</p>
Table 6.6.12	<p>We concur with the scoping in of various potential impacts to The Mens SAC which is designated for its maternity colonies of barbastelle bats (<i>Barbastella barbastellus</i>). These bats are known to forage up to 12km as such any severance of flight-lines resulting from this proposal's cable route could have an impact on the SAC.</p>
Table 6.6.12	<p>We concur with the scoping in of various potential impacts to Arun Valley SPA (and the underpinning Amberley Wild Brooks and Pulborough Brooks SSSI) which is designated for its non-breeding assemblage of Bewick's swan (<i>Cygnus columbianus bewickii</i>). Bewick's swan utilise land up to 10km from the designated sites. As where birds regularly forage on land outside the designated site, this land may be considered functionally linked to the SPA and as such its loss or deterioration resulting from the proposal's cable route could have an impact on the SPA.</p>
Table 6.6.12	<p>We note that Pagham Harbour SPA & Ramsar (and SSSI) site - which is designated for its populations of dark-bellied brent geese, other wintering birds and breeding terns - has been scoped out in table 6.6.12. This is acceptable due to the distance between the designated sites and the proposed landfall point being greater than 10km, which is the established upper foraging distance brent geese are likely to travel from their roost sites.</p>

Table 6.6.12	<p>In addition to the potential impacts to Amberley Wild Brooks and Pulborough Brooks SSSI, we note that various potential impacts for a further four SSSIs have been scoped in for consideration of land take, hydrological impacts, pollution events and the introduction of invasive non-native species, namely:</p> <ul style="list-style-type: none"> • Chanctonbury Hill SSSI • Amberly Mount to Sullington Hill SSSI • Arundel Park SSSI • Climping Beach SSSI
Table 6.6.12	<p>We disagree with the conclusion that impacts as a result of noise and vibration should be scoped out for all SSSIs except Amberley Wild Brooks and Pulborough Brooks SSSIs as; Chanctonbury Hill, Arundel Park, Climping Beach SSSI are within the scoping boundary and have interest features which could be impacted by vibration and noise generated by the proposal.</p>

Annex 4 – Seascape, Landscape and Visual Assessment

Natural England (NE) welcomes this opportunity to comment on the landscape, seascape, visual assessments and related chapters of the Rampion 2 EIA Scoping Report. In keeping with our previous comments to the applicant on the potential landscape and visual effects likely to arise from the development we will limit our comments to those effects associated with the South Downs National Park, Chichester Harbour AONB, Isle of Wight AONB, Sussex Heritage Coast and Tennyson Heritage Coast and their seascape setting. Subject to confirmation, NE may also provide comments going forward for the High Weald AONB.

For landscape, visual and seascape effects both within and outside of these designated and defined landscapes we advise that close attention is paid to the comments and advice provided by the relevant Local Planning Authorities, including the South Parks National Park and AONB Partnerships. The detailed local knowledge that these parties can provide, particularly in respect of the special qualities of these designations, will be of a greater depth and detail than that provided by Natural England.

NE offers its comments and advice without prejudice. Our comments and advice on the landscape, seascape and visual effects of the scheme may change as further evidence and information emerges from further assessments undertaken by the applicant as a part of the EIA process. We may also receive other relevant information from local authorities, the AONB Partnership and other sources. NE will also be collecting its own evidence to inform our comments and advice and may continue to do so until the end of the examination process.

Our comments are based solely on the documents provided by the applicant and site visits to selected viewpoints undertaken in July 2019, combined with our experience of advising on other major offshore renewable energy schemes located within the seascape setting of nationally designated landscapes. Evidence obtained during the determination and construction of the Rampion 1 OWF (2013 – 2015) will also be drawn upon.

Natural England is disappointed to see that the applicant is proposing to develop the area located to the east and south of the existing Rampion OWF (as shown in Figure 5.13.1). We understand that this area, referred to as 'Zone 6', formed part of the original Rampion 1 Round 3 development area and that the applicant maintains development rights for this area.

Following recent conversations, Natural England now understands that in the autumn of 2019, Crown Estate agreed in principal that the applicant could bring these two sites i.e. Zone 6 and the Rampion Extension forward as a single project. Natural England were not however, consulted on this matter. We understand that the extension to the original project under the 2017 extension round will have a capacity of 400MW (equivalent to the original Rampion project) and be located to the west of this project. And in addition there is also being proposed a further Round 3 project known as Rampion 2 located to the south and east of the original project, which will have a capacity of 800MW. The combined capacity of these two projects presented in the EIA Scoping Document is 1200MW which would quadruple the scale of the existing project capacity. Therefore given the issues we previously raised in relation to Rampion 1 we advise that there is a risk that the scale of the proposed combined development maybe beyond what could be considered acceptable.

Since we were not consulted on this being taken forward as a single project, confirmation is sought from the applicant that the existing Conditions, as

stipulated in the Deemed Marine Licence for Rampion 1, will be adhered to. In particular, a continued commitment to the 'Exclusion Zone' from which turbines were to be excluded in order that the adverse effects on South Downs National Park (SDNP) and the Sussex Heritage Coast (SHC) would be reduced and other important design principles. We look forward to working with the applicant to understand how the existing design principles, will be incorporated and securing further defined design principles for Rampion II prior to reaching examination.

For further context and clarity, we previously provided advice for the Rampion Extension area only to the Crown Estate in July 2018, which highlighted potential constraints. The advice relevant to this section of the Scoping Report is reproduced below:

In respect of the statutory purposes of the South Downs National Park. Dependant on the final layout design and technology choice Natural England advises that there is the potential for the purposes of this designated landscape to be adversely effected.

Noting that the existing Rampion OWF is a significant element within the seascape setting of the South Downs National Park (located at 26km from Beachy Head) Natural England advises that the development of a second OWF to the west of the existing array has the potential to further adversely affect the seascape setting of the National Park. Although located at a greater distance from the national park boundary the likely technology choice i.e. the use of larger turbines than those used for the Rampion Array and the positioning of a new array within the extension site, have the potential to further degrade views out to sea from the South Downs National Park.

Natural England is concerned that:

- A new array constructed immediately to the west of the existing Rampion OWF so that it appears, when viewed from the shore, to be an extension of Rampion. We are concerned that a curtaining effect (see earlier comments for explanation) will be created thereby reducing the extent of open views from the shore to the horizon and thereby enclosing a greater portion of the visible horizon.*
- Substantially larger turbines (likely maximum height 300m) are used to those used for the Rampion OWF (maximum height of 140m), particularly if the new array is located immediately to the west of the existing OWF. The disjointed visual effect this would create would be inelegant and detracting as the join between the two OWF would be emphasised when viewed from the shore and potentially from within the South Downs National Park.*

NE advises that to prevent or at least reduce the magnitude for these effects that any future OWF built within the extension site should;

- Maintain a perceptible separation distance (from all land based viewpoints) between the existing Rampion OWF and any new array. The distance should be sufficient that a clear distinction can be made between the two arrays in order that they are perceived as separate objects in the seascape when viewed from shore and from within the South Downs National Park.*
- That clear lines of sight are left between the arrays so that open views to the horizon are maintained when viewed from shore and from within the South Downs National Park.*
- Either select turbines which are the same height as those used in Rampion (NE understands this may not be possible), or design any new array so that the turbines appear to be the same height as those used for the Rampion OWF by locating them further off-shore i.e. at a greater separation*

distance from on-shore viewpoints. The intention would be great a balanced vista where the height of the two, clearly distinct arrays, when appear at least to be the same.

Natural England proposes that these principals of good design are adopted in order to reduce any possible detrimental effects of the statutory purposes of the South Downs National Park and deliver a balanced and definable set of objects in the seascape.

Specific Comments on the EIA Scoping Report

Section	Comment
Seascape, Landscape and Visual Assessment	
5.13.1	<p>The evidence generated and conclusions reached in the seascape, landscape and visual assessments should be used to inform an assessment the potential significant effects of the scheme on the statutory purpose(s) and special qualities of the following designated landscapes;</p> <ul style="list-style-type: none"> • South Downs National Park (SDNP) • Isle Wight AONB (IoW AONB) • Chichester Harbour AONB. (CHAONB) <p>Thought should be given to a similar assessment for the High Weald AONB. Please see below for further details.</p> <p>Attention should also be given to the following Heritage Coasts:</p> <ul style="list-style-type: none"> • Sussex Heritage Coast (SHC) • Tennyson Heritage Coast (THC)
5.13.4	<p>NE agrees that the SLVIA Study Area should cover a radius of 50km measured from the outer edges of the Scoping Boundary (as illustrated in Figure 5.13.1). We also agree that significant effects will not occur beyond the outer limits of the SLVIA Study Area (Figure 5.13.1).</p>
5.13.18	<p>With reference to Figures 5.13.2 and 5.13.3 as shown on pages 363 and 365. In addition to the SDNP and SHC the Chichester Harbour AONB is also within 30km of the Scoping Boundary whilst both the Isle of Wight AONB and High Weald AONB are within 35km. In addition a portion of the Tennyson Heritage Coast (located within the IoW AONB) falls within the 50km radius.</p> <p>With the exception of the High Weald AONB all of these designated and defined landscapes have locations where theoretical visibility is within the ‘higher’ banding. It is clear therefore that multiple designated and defined landscapes are located well within the 50km Study Area and have the potential to be adversely effected by the scheme. It is for this reason that NE wishes to see that the potential effects of the scheme on the statutory purposes and special qualities of these designations is scoped into the EIA.</p>

	<p>NE advises that the High Weald AONB is unlikely to experience significant adverse effects due to the intervening land form of the South Downs. We note also that 'bare ground' terrain model has been used in the creation of the ZTV and the commentary at 5.13.81. We note however that there are locations with the designation where theoretical visibility within the 'medium' banding occurs. Although we are minded to suggest that the High Weald AONB is scoped out of the analysis NE advises that the applicant consults with the High Weald AONB Partnership to determine this and should they be in agreement to scope this designation out of the EIA.</p> <p>NE advises that the New Forest National Park and Surrey Hills AONB can be discounted from the scope of the EIA.</p>
5.13.28	<p>NE notes the cumulative SLVIA assessment will include an assessment of '<i>the ways in which Rampion 2 will have additional effects when considered with other existing..developments</i>'. We take '<i>existing..developments</i>' to mean Rampion 1. We note the Combined Theoretical Visibility mapping shown in Figure 5.13.5a.</p> <p>NE will also be paying close attention to the appearance of the Rampion 2 as it relates to Rampion 1. As we made clear in our advice to the Crown Estate in 2018 (see above for details) this is a <u>critical issue</u> for Natural England. NE considers that the concept of 'Good Design' (as set out in NPS 1) should be applied in order that a visually disjointed and incoherent scheme design is avoided.</p>
5.13.29	<p>NE requests that the latest versions of the following designated landscape Management Plans are included in the baseline information.</p> <ul style="list-style-type: none"> • SDNP Management Plan 2019 - 2024 • Chichester Harbour AONB Management Plan 2019 - 2024 • Isle of Wight AONB Management Plan 2019 - 2024 <p>Should the High Weald AONB be scoped into the EIA the latest management plan for this designated should also be included in the baseline information.</p> <p>These documents will provide detailed information about the special qualities of each designated landscape. We note that these documents are referred to at 5.13.57.</p> <p>We note also at 5.13.56 that reference is made to the Sussex Heritage Coast Strategy and Action Plan (2016 – 2020). This document should also be added to the baseline documents.</p>
Table 5.13.1	<p>NE notes the use OS Terrain 5 Digital Terrain Model for coastal sections of the study area. NE would like to understand the geographical extent of the coastal sections of the study area. For instance does this include the coastal sections of the IoW AONB?</p>

	<p>Does it include the entirety of the Sussex Heritage Coast?</p> <p>In addition NE would like to see the use of the OS Terrain 5 Digital Terrain Model extended to 30km from the boundary of the Scoping Area.</p>
Table 5.13.1	<p>NE also requests that the SDNP View Shed Analysis is incorporated into the baseline information. The documents associated with this information can be found here:</p> <p>https://www.southdowns.gov.uk/planning-policy/south-downs-local-plan/local-plan-evidence-base/evidence-and-supporting-documents/viewshed-analysis/</p>
5.13.39	<p>The key consideration for NE is understanding how Marine Character Areas 07 and MCA08 contribute to the seascape setting and special qualities of the SDNP, Chichester Harbour AONB and Isle of Wight AONB.</p>
5.13.54	<p>National Parks and Areas of Outstanding Natural Beauty are designated for their natural beauty.</p> <p>Natural beauty is a statutory expression used in sections 5 and 11A of the National Parks and Access to the Countryside Act 1949, as amended; sections 85 – 87 of the Countryside and Rights of Way Act 2000, and section 99 of the Natural Environment and Rural Communities Act 2006. '<i>Scenic qualities</i>' and '<i>historic landscape qualities</i>' although useful as a label for describing aspects of natural beauty, are not statutory expressions.</p> <p>Heritage Coasts are defined in part for their natural beauty.</p>
Table 5.13.2	<p>NE requests that the Tennyson Heritage Coast is included in this listing.</p>
5.13.66	<p>NE notes the extensive listing of locations from where views of the MCA7 are possible. We advise the sea surface of MCA7 is also visible from a number of places located on the eastern side of the Isle of Wight. These include Ventnor Down and Culver Down which are located within the IoW AONB.</p>
5.13.68	<p>The 2014 MMO view shed analysis refers to '<i>areas of the sea</i>'. The visual analysis for the Rampion 2 project (as illustrated in Figure 5.13.2) should seek to understand the visual envelope of structures which are up 325m in height. As a consequence there will be locations, both on the coast and inland where the surface of the sea is not visible but the turbines are. We note this fact is acknowledged at 5.13.75.</p> <p>The MMO analysis provides a broad indication of locations on land where the turbines would be visible. However this evidence provides only a guide to such locations and should not be used to define these locations.</p>

5.13.72	NE notes and welcomes the statement that ' <i>likelihood will not be considered as a factor of significance</i> ' and that the worst case will use excellent visibility. In such conditions the turbines will be plainly visible in views available from both coastal and inland areas located in multiple designated and defined landscapes.
5.13.88	<p>NE welcomes the confirmation that the principal visual receptor groups will include:</p> <ul style="list-style-type: none"> • Users of long distance paths (including the South Downs Way National Trial) • Users of long distance cycle routes • Users of Public Rights of Way • Visitors to tourist and visitor locations • Visitors to the South Downs IDSR <p>In addition NE requests that users of Open Access land are added to this list.</p>
5.13.90	NE notes the categorisation of viewpoints in Table 5.13.3. NE offers no comment on the suitability of the categorisation made. However advise that the applicant pays close attention to the advice of the SDNP and Chichester Harbour AONB Partnership.
5.13.92	<p>We note the applicant's argument that '<i>familiarity with the visual effects of Rampion 1, such that people will be better to visualise the effects of Rampion 2</i>'. Whilst we understand the merits of this line of reasoning Natural England notes that;</p> <ul style="list-style-type: none"> • The far greater geographical spread of Rampion 2 when compared to Rampion 1. • The far greater visual envelop of Rampion 2. • The use of turbines which over twice the height as those used in Rampion 1. • The need to understand the in-combination effect; how the Rampion 2 will relate visually to Rampion 1. <p>Whilst we accept that some of the Rampion 1 viewpoints are now reductant the notion that '<i>people will be better able to visualise the effects of Rampion based on fewer viewpoints</i>' in misplaced for the reason set out above.</p>
5.13. 93	NE agrees that the greater geographical extent of the ZTV means viewpoints located at greater distances will be required. Hence the additional viewpoints suggested above.
Table 5.13.3	<p>In addition to the viewpoints listed Natural England request that the following locations are also used as viewpoints within the SLVIA. To avoid confusion these been identified by letter rather than number. The distance figures stated are the approximate separation distance from the EIA scoping boundary.</p> <p>Distance figures quoted are to the edge of the Rampion 2 Scoping Boundary.</p>

	<p><u>South Downs National Park</u></p> <ul style="list-style-type: none"> A. Butser Hill. (45km) B. The Trundle. (29km) C. Ditchling Beacon. (24km) NE notes that the applicant is seeking to exclude this viewpoint. D. Chanctonbury Ring. (24km) E. Amberley Mount. (26km) F. Chantry Hill. (25km) G. Beeding Hill. (21 km) same as Rampion 1 (VP25). NE notes that the applicant is seeking to exclude this viewpoint. H. Kingley Vale. (31km) I. Mount Caburn. (22km) J. Arundel Castle. (23km) K. Halnaker Windmill. (26km) L. Telscomb tye. (16km) M. Beach, Cuckmere Haven (16km). N. Hollinbury Hillfort. (18km) O. Wolstonbury Hill. (23km) P. Petworth Park. (37km) <p>NE has been advised by the SDNP Authority as to the suitability of these locations.</p> <p><u>Chichester Harbour AONB</u></p> <p>Viewpoint 22 as proposed in the EIA Scoping is fine to use.</p> <p><u>Isle of Wight AONB</u></p> <ul style="list-style-type: none"> Q. Culver Down. Either Bembridge Fort or the WW1 fortifications would make suitable locations. (32km) R. St. Boniface Down above Ventnor. Easterly OS viewpoint. (36km) S. Lighthouse St Catherine's Point (45km) <p>NE undertook joint site visits to these locations in July with the IoW AONB Partnership. NE advises that the IoW AONB Partnership is consulted on these locations in order to confirm their suitability.</p> <p>NE suggests that viewpoint 24 is retained in order that a location outside of the IoW AONB is included in the EIA.</p>
5.13.97	NE notes the parameters of the Maximum Development Scenario and requests that a diagrammatic representation of this is made available by the applicant at the earliest opportunity. The diagram should include the boundaries of the designated and defined

	landscapes which fall with the 50km radius study area and the location of all viewpoints.
5.13.97	Aviation lighting. NE notes the intention to use medium density aviation warning lights (2000cd intensity) on the significant peripheral WTG. NE notes that other offshore windfarms currently in the design and determination phases are opting to use 200cd intensity lighting. NE requests that the applicant explores the possibility of using these lower intensity lights when weather conditions permit in order that any potential adverse effects on the South Downs IDSR are mitigated as far as possible.
5.13.99	NE notes the inherent nature of the embedded mitigation measures within the design of the scheme and notes that these evolve over the course of the design development process.
Table 5.13.4	<p>Natural England fails to understand how the Environmental Measure Proposed constitutes embedded environmental measures (primary mitigation as defined at 4.4.19) which will reduce potential effects on seascape, landscape and visual receptors. Taking each in turn:</p> <ul style="list-style-type: none"> • C - 36: Due to minimum spacing requirements between 250m and taller WTG the geographical limitations of the Scoping Boundary would prevent the erection more than 116 WTG of 16Mw output. The current MDS is for either 75 (16Mw) or 116 (10Mw). NE understands that machines of 10Mw (190m to blade tip) may not be available by the mid-20s. • C - 37: 325m is a current maximum projected size of WTG which are likely to be available by the mid-20s'. • C - 38: The choice of foundation type has little influence on the seascape, landscape and visual effects resulting from the operation of the scheme. • C - 40: No information is currently available on the location of these structures. Generally substations are located on the land side boundary of an OWF. Is the intention for Rampion 2 to locate these structures as far away from onshore landscape and visual receptors as possible? <p>We also note that C-61 is missing from this list.</p>
5.13.100	In line with GLVIA3 (para. 3.34 p.41) NE advises that moderate effects should not be completely disregarded in determining the final design of the scheme.
5.13.104	NE notes the commitment to ' <i>focus the SLIVA on the effects resulting Rampion 2 in conjunction with the existing Rampion 1 project</i> ' in respect of cumulative effects.
Table 5.13.5	<p>Accepting the following NE agrees with the summarised information contained in Table 5.13.5</p> <ul style="list-style-type: none"> • Duration of construction effects. These are referred to as short-term. GLVIA3 defines short-term as 'zero to 5 years'. Can the applicant confirm that the construction phase of the project will be completed within 5 years or thereabouts? • Tennyson Coast Heritage Coast should remain scoped in at this stage (all instances).

	<ul style="list-style-type: none"> • NE advises that some to the excluded viewpoints listed in Table 5.13.3 will need to remain in scope (all instances). • NE advises that all the SDNP special qualities should remain in scope. • The relevant special qualities for the Chichester Harbour AONB and Isle of Wight AONB need to be scoped into the EIA
5.13.110	Natural England advises that the potential effects of the scheme should be assessed on both statutory purposes of the SDNP. For this reason we advise that the special qualities listed here remain in scope.
5.13.112	Natural England agrees that the New Forest National Park can be scoped out at this stage.
5.13.113	Natural England agrees that the Surry Hills AONB can be scoped out at this stage.
5.13.114	Natural England agrees that the Hamstead Heritage Coast can be scoped out at this stage.
5.13.115	Natural England disagrees that the Tennyson Heritage Coast can be scoped out at this stage.
5.13.135	<p>NE requests that the Chichester Harbour AONB Partnership and the Isle of Wight AONB Partnership are invited to join the Expert Topic Group.</p> <p>Should the High Weald AONB remain in scope then representatives from this Partnership should also be invited to attend.</p>
Landscape and Visual Amenity (onshore)	
6.2.5	Natural England notes that the study area for the onshore elements is still preliminary at this stage.
6.2.8	<p>NE notes that a 2km buffer for the study area was considered to be appropriate for a number of other onshore cable routes associated with OWF located in the North Sea. We advise that the buffer zone should be informed by landscape and visual factors specific to the Rampion 2 project and that comparisons with similar locations in other landscapes are not necessarily appropriate.</p> <p>We note the request for specific feedback on this matter. NE advises that the SDNP Authority are best placed to provide detailed advice on this matter. Their advice should therefore be closely followed.</p>
6.2.15	NE welcomes the commitment to provide a ' <i>clear and accessible narrative explanations of the rationale underlying the assessment made</i> '.
6.2.16	NE notes that moderate levels of effect also have the potential to be considered significant.
Table 6.2.2	NE also requests that the SDNP View Shed Analysis is incorporated into the baseline information. The documents associated with this information can be found here:

	<p>https://www.southdowns.gov.uk/planning-policy/south-downs-local-plan/local-plan-evidence-base/evidence-and-supporting-documents/viewshed-analysis/</p> <p>The High Weald AONB is within the Study Area for the onshore elements of the works (see Figure 6.2.3). The management plan and associated landscape character assessment for this designated landscape should also be included in the baseline information.</p>
6.2.36	NE notes the commitment to assess the effects of the onshore elements of the Proposed Development on the special qualities of the SDNP and High Weald AONB.
6.2.44	<p>NE notes that no viewpoint locations are currently proposed for the onshore elements of the scheme.</p> <p>NE advises that close attention is paid to the advice of the SDNP Authority and the High Weald AONB Partnership in the selection of suitable viewpoint locations. ZTV for the construction phase of the onshore elements should be used to guide this process.</p>
6.2.52	In line with GLVIA3 (para. 3.34 p.41) NE advises that moderate effects should not be completely disregarded in determining the final design of the scheme.
6.7.81	<p>NE notes the request for suggestions of initial viewpoints within the study area. However we note at 6.7.80 that the applicant considers that there <i>'will be a small number of elevated, long distance locations beyond'</i>.</p> <p>NE advises that close attention is paid to the advice of the SDNP Authority and the High Weald AONB Partnership in the selection of suitable viewpoint locations both within and without of the study area. ZTV for the construction phase of the onshore elements should be used to guide this process.</p>
Design Commitments	
C - 36	<p><i>'The number of turbines will not exceed that of the existing Rampion 1 project'</i>.</p> <p>See above for comment (Table 5.13.4).</p>
C - 37	<p><i>'Maximum blade tip height is 325m from LAT and rotor diameter of 275m. DCO requirements'</i>.</p> <p>See above for comment (Table 5.13.4).</p>
C - 40	<i>'There will be up to three offshore substations installed to serve the Proposed Development. The exact locations, design and visual appearance will be subject to a structural study and electrical design, which is expected to be completed post consent. The offshore</i>

	<p><i>substations will be installed on jacket, monopile foundations, similar to those described for the turbines themselves’.</i></p> <p>See above for comment (Table 5.13.4).</p>
C – 61	<p><i>‘Regard to Principles held in Rampion 1 design Plan and Landscape constraints to be developed for Rampion 2, for consideration of SLVIA impacts to the South Downs National Park/Sussex Heritage Coast’</i></p> <p>NE assumes that this statement refers to the following:</p> <p>(3) The design plan required to be approved under paragraph (1)(a) must—</p> <p>(a) be prepared having regard to the need to—</p> <p>(i) limit as far as possible the horizontal degree of view of wind turbine generators from the South Downs National Park and the Sussex Heritage Coast;</p> <p>(ii) increase as far as possible the distance of the wind turbine generators from the South Downs National Park and the Sussex Heritage Coast;</p> <p>(iii) locate the largest turbines, in any hybrid scheme, to the south-western portion of the Order limits; and</p> <p>(iv) provide clear sight lines through the wind turbine layout in order that the regular geometric pattern of the array is apparent in views from the South Downs National Park and Sussex Heritage Coast; and</p> <p>Design Principles for Rampion 1, as set out in the DML at Condition 11 of Schedule 13.</p> <p>Natural England wishes to understand at the earliest opportunity how the Design Principles for Rampion 1 will be used to inform the design of Rampion 2. We note the applicant’s comment to fulfil this objective.</p>
C – 66 (potential)	<p><i>‘The Proposed Development will aim to minimise effects on the special qualities of the South Downs National Park and High Weald AONB through careful design consideration in terms of scale, size and location, and taking account of the relevant policy and guidance.’</i></p> <p>The Isle of Wight AONB and Chichester Harbour AONB need to be added to this objective.</p> <p>NE advises that this commitment is adopted in full by the applicant.</p>
C – 110	<p><i>‘RED will agree a lighting scheme for the aviation lighting of structures (turbines and offshore support platforms) above 60m in</i></p>

(potential)	<p><i>height with the relevant authorities.'</i></p> <p>See above for comment (at 5.13.97)</p>
Appendix C SLVIA Methodology and Appendix D LIVA Methodology	
To avoid the need to provide repetitive comments made in respect of the SLVIA Methodology are also relevant to the LVIA Methodology.	
1.2.7 – 1.2.8	<p>Natural England notes that separate consultancies have been employed by the applicant to undertake the SLVIA and the LVIA.</p> <p>Natural England expects that there is high degree of commonality in the methodologies used in these assessments in respect of (but not limited to):</p> <ul style="list-style-type: none"> • Creation of the baseline. • Visual representations. • Sensitivity assessment (value and susceptibility). • Magnitude of change methodology • Evaluation of significance. • Narrative justification of the evaluation of significance. • Assessment of the potential effects of Rampion 2 on the special qualities of designated landscapes <p>We note the intention to '<i>follow a broadly similar assessment methodology</i>'.</p> <p>NE notes there is no description of how the assessment of the potential effects of Rampion 2 on the special qualities of designated landscapes will be undertaken. We request that such a description is provided as a matter of urgency</p>
1.3.3 and 13.4	<p>We note the reference to '<i>special landscape qualities</i>' (at 1.3.3 under construction effects) and '<i>effects on defined special qualities of designated landscapes</i>' (at 1.3.4 under operational effects).</p> <p>NE assumes that these are one and same i.e. effects on defined special qualities of designated landscapes.</p>
1.4.9	<p>Due to Covid-19 restrictions NE wishes to have confirmation that the viewpoint photography and visual assessment surveys were undertaken at the times stated.</p>
1.8.12 and	<p>NE notes the requirement for images which represent the '<i>maximum visibility scenario</i>'. NE requests that due to the orientation of</p>

1.8.13	<p>Rampion 2 with the Sussex coast and viewpoints located within the SDNP (and Chichester Harbour AONB) careful consideration is given to the time of day that the images are captured.</p> <p>Opportunities to see turbines 'back-lit' i.e. in silhouette is a notable feature of the Rampion 1 as nearly all viewpoints are southerly facing. This is a unique attribute of Rampion 1 but would be shared by the turbines of Rampion 2. Back-lighting is most extreme in the early morning and late evening during the months of October through to March. At this time the colour rendering of the turbines provides no mitigation for the adverse visual effects caused. Rather the machines are seen as dark objects upon the horizon. In certain instances this effect can be extreme.</p> <p>NE advises that for selected viewpoints photomontages will need to be prepared for this lighting scenario as well for a more typical '<i>maximum visibility scenario</i>' which generally pertains to the front lighting of turbines in the late afternoon of summer months. For Rampion 1 (and 2) when seen from the SDNP this would only occur in the summer months when the sun sets in the north-west. We note at 1.10.13 the applicant considers this point of the year and time of day is considered to be the '<i>maximum visibility scenario</i>' for Rampion 2. NE advises that due to the unique orientation of the Rampion arrays a second '<i>maximum visibility scenario</i>' is also possible and that the SLVIA needs to take account of this factor.</p> <p>For the loW AONB a '<i>maximum visibility scenario</i>' based upon late afternoon summer of the months is appropriate.</p>
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Anne Holdsworth
DCO Liaison Officer
Land & Business Support

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Tel: +44 (0)7960 175682

www.nationalgrid.com

SUBMITTED ELECTRONICALLY:
Rampion2@planninginspectorate.gov.uk

15 July 2020

Dear Sir/Madam

APPLICATION BY RAMPION EXTENSION DEVELOPMENT LIMITED (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE RAMPION2 OFFSHORE WIND FARM (THE PROPOSED DEVELOPMENT)

SCOPING CONSULATION REPONSE

This is a response on behalf of National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG). I refer to your letter dated 6th July 2020 in relation to the above proposed application. Having reviewed the scoping report, I would like to make the following comments:

National Grid infrastructure within / in close proximity to the order boundary

Electricity Transmission

National Grid Electricity Transmission has a high voltage electricity overhead transmission line and high voltage substations within the scoping area. The overhead line and substations form an essential part of the electricity transmission network in England and Wales.

Substations

BOLNEY 400KV Sub Station

BOLNEY 132KV Sub Station

Overhead Lines

4VM 400 kV OHL Bolney – Ninfield 1&2
 Bolney – Lovedean 1&2

I enclose a plan showing the location of National Grid's apparatus in the scoping area as follows:

- overhead line; and
- the substations.

Gas Transmission Infrastructure:

National Grid Gas Transmission has no assets within the scoping area.

Specific Comments – Electricity Infrastructure:

- National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset
- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. National Grid recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for "overhead line clearances Issue 3 (2004)".
- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.
- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance Note GS 6 "Avoidance of Danger from Overhead Electric Lines" and all relevant site staff should make sure that they are both aware of and understand this guidance.
- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum "sag" and "swing" and overhead line profile (maximum "sag" and "swing") drawings should be obtained using the contact details above.
- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.
- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation ("pillar of support") drawings can be obtained using the contact details above.
- National Grid Electricity Transmission high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide National Grid full right of access to retain, maintain, repair and inspect our assets. Hence we require that no permanent / temporary

structures are to be built over our cables or within the easement strip. Any such proposals should be discussed and agreed with National Grid prior to any works taking place.

- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

Further Advice

We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.

Where any diversion of apparatus may be required to facilitate a scheme, National Grid is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by National Grid. Further information relating to this can be obtained by contacting the email address below.

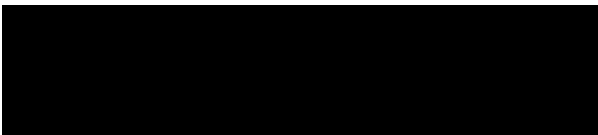
Where the promoter intends to acquire land, extinguish rights, or interfere with any of National Grid apparatus, protective provisions will be required in a form acceptable to it to be included within the DCO.

National Grid requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All consultations should be sent to the following email address: box.landandacquisitions@nationalgrid.com

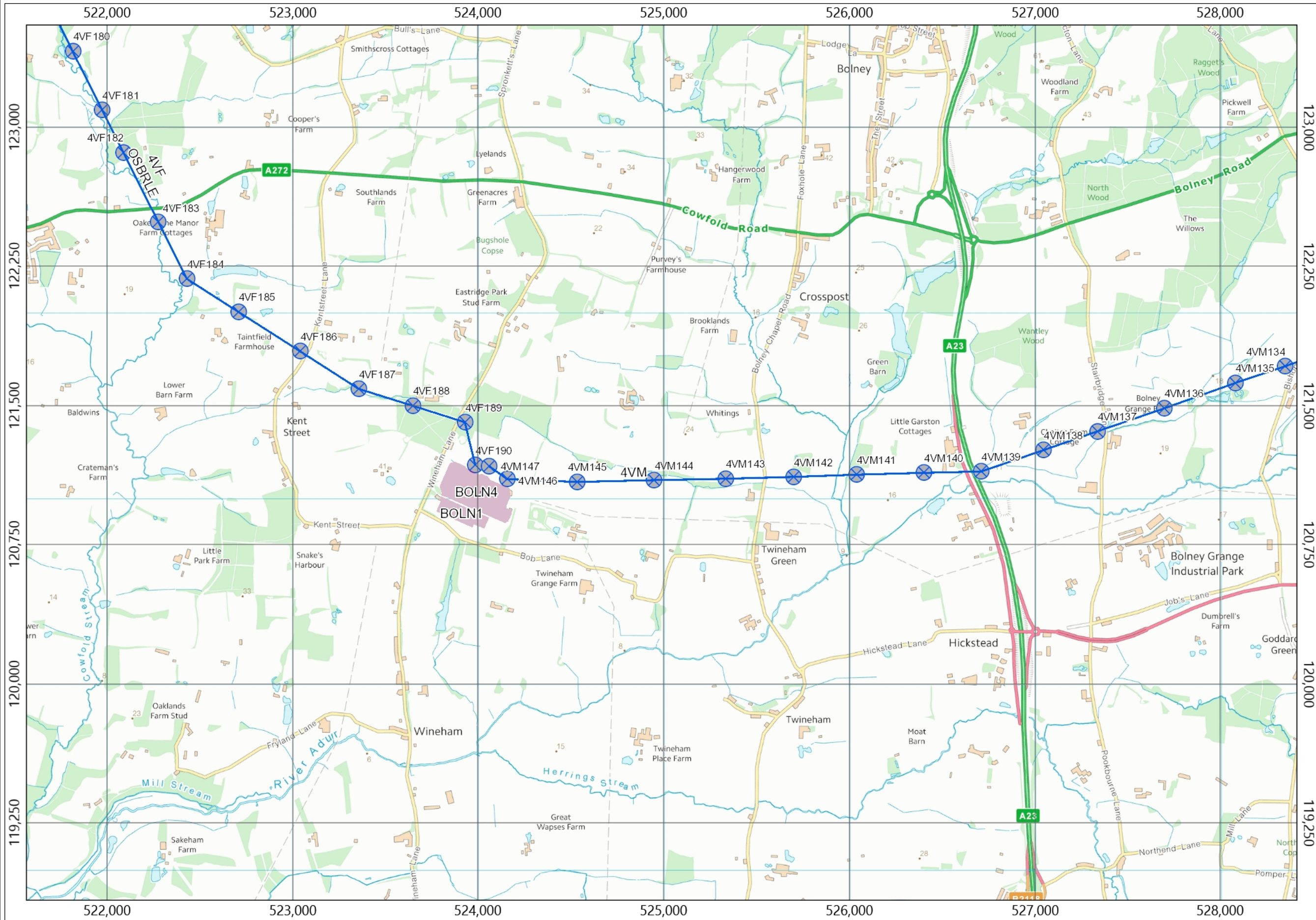
I hope the above information is useful. If you require any further information, please do not hesitate to contact me.

The information in this letter is provided notwithstanding any discussions taking place in relation to connections with electricity customer services.

Yours faithfully



**Anne Holdsworth
DCO Liaison Officer, Land and Acquisitions**



Legend:

- Substations Commissioned
- Circuits
 - Commissioned
 - Decommissioned Group
 - Planned and Spares
- OHL 400kV Commissioned
- OHL 275kV Commissioned
- OHL 132kV & Below Commissioned
- Towers Commissioned
- Buried Cable Commissioned
- Fibre Cable Commissioned
- Pilot Cable
- Oil Pipe
- Cooling Pipe
- Cooling Station
- RAMM
- Cable Tunnel
- Gas Operational Boundary
- Gas Site Boundary
- Trial Hole
- Vantage Point
- Aerial Marker Post
- Pipe Crossing Point
- CP Test Post
- Transformer Rectifier
- Pipeline Crossing
- Sleeve
- Nitrogen Sleeve
- Other Sleeves
- Pipe Line Control Point
- Named Pipeline Section
- River Crossings

Notes:

RAMPION 2 ASSET PLAN 2

0 0.51 1.0 Kilometers

OS Disclaimer: Background Mapping information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. ©Crown Copyright Ordnance Survey NationalGrid Electricity-100024241.NationalGrid Gas-100024886

Date: 14/07/2020 Page size: A3 Landscape Scale: 1: 20,000
 Time: 17:00:18 Print by: Holdsworth, Anne



NG Disclaimer: National Grid UK Transmission. The asset position information represented on this map is the intellectual property of National Grid PLC (Warwick Technology Park, Warwick, CV346DA) and should not be used without prior authority of National Grid.
 Note: Any sketches on the map are approximate and not captured to any particular level of precision.

Environmental Hazards and
Emergencies Department
Centre for Radiation, Chemical and
Environmental Hazards (CRCE)
Seaton House
City Link
London Road
Nottingham NG2 4LA

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www.gov.uk/phe

Your Ref EN010117-000006
Our Ref: 53782

Mr Richard Kent
Senior EIA Advisor
Major Casework Directorate
Temple Quay House
2 The Square
Bristol BS1 6PN

31st July 2020

Dear Mr Kent

**Nationally Significant Infrastructure Project
Rampion2 Offshore Wind Farm - Scoping Consultation Stage**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

PHE exists to protect and improve the nation's health and wellbeing and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications.

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

Having considered the submitted scoping report we wish to make the following specific comments and recommendations:

Environmental Public Health

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. The attached appendix summarises PHE's requirements and

recommendations regarding the content of and methodology used in preparing the ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.

Human Health and Wellbeing

This section of PHE's scoping response, identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

Human health

- 1) A section on "population and human health" is not currently scoped in to the ES, and it is suggested that any effects on health will be discussed in the individual assessments of the environmental aspects. However, this approach risks missing the broader view of the local areas' health profiles and challenges, the potential positive and negative effects on the wider determinants of health, and possible combined effects. Additionally some relevant considerations for human health may not fit into the proposed chapters, eg, impact on local communities' access to green/bluespace; opportunities for recreation/physical activity.
- 2) The scoping report does not identify a definition of health.

Recommendations

The ES should include a chapter on population and human health in order to capture a broader view of the impacts and effects of the proposal on the local population. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. This chapter should identify sensitive receptors in both the general population and vulnerable populations, the NSIP's potential direct and indirect impacts on each population, and the potential effects in relation to these populations. This chapter should reference health impacts and effects outlined in individual assessments of environmental aspects, and also include impacts and effects that sit outside these chapters, for example, local communities access to green and bluespace, and opportunities for recreation and physical activity, and note possible combined effects.

The ES should accept the broad definition of health proposed by the World Health Organisation (WHO) and also include specific reference to mental health within the definition of health.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the impacts on mental health should be taken. The Mental Wellbeing Impact Assessment (MWIA) may assist. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets.

Access

- 1) In the proposed assessment of 'other marine users', the baseline recreational use dataset appears to be limited to recreational diving.

- 2) The impact of the proposal on access to green and blue space, physical activity and recreation opportunities for the local communities, particularly for the landfall and onshore substation sites, does not appear to be within scope.

Recommendations

Access to good quality greenspace and bluespace, and living in greener communities, is associated with a range of physical and mental health benefits.

Additional datasets should be located to inform the baseline recreational use research within the 'other marine users' section, to include other inshore recreation to get a more accurate picture of baseline use.

The ES should clearly describe the impact of construction and operation on both the quantity and quality of both publicly and non-publicly accessible green/bluespace and green infrastructure, and present the estimated effects of this for the local community. The assessment should identify changes in opportunities for outdoor recreation including physical activity. This should be distinct from the impact on tourism.

Baseline data used in the assessment of onshore and offshore recreation activity should include a review of local authority health strategies and policies, eg the Joint Strategic Needs Assessment and Joint Health and Wellbeing Strategy to understand how the local area might be using the green/bluespace to address local health priorities and health inequalities. Knowledge of how these spaces are used locally to support health will help to inform the assessment of the effects of the impact on onshore and offshore recreation and physical activity opportunities.

Traffic and transport

- 1) The impact and effect of construction on traffic and transport with regard to links between communities, and access to services, facilities and leisure opportunities is not within scope.
- 2) Pedestrian and cyclist activity along PRoWs and on the National Cycle Network (NCN) is within scope, but it is unclear if pedestrian and cyclist activity on all roads within the development boundary is within scope.
- 3) The definitions of 'public open space' and 'parks and recreation facilities' are ambiguous and there is no rationale provided for assignment of receptor sensitivity for these (Table 6.7.2).

Recommendations

Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality. Providing infrastructure to support cycling and walking, however, is not necessarily sufficient to promote these activities. The routes for cycling and walking should link places where people live to destinations that people need or want to visit.

The ES should include an assessment of the impact of construction on links between communities, and access to services, facilities and leisure opportunities.

The ES should also collect baseline non-motorised user (NMU) data on all roads within the development boundary, and include an assessment of the impact of construction on NMU beyond formal PRoW and NCN.

The ES would benefit from further definition of differences between 'public open space' and 'parks and recreation facilities' and explanation of the rationale behind the assignment of low sensitivity for public open space given the potential impact on user perception/use of greenspace due to increased traffic.

Socio-economic

- 1) A range of impacts on commercial fishing during the construction, operation and decommissioning of the site is scoped in. It was unclear whether the socioeconomic effect from loss of fishing opportunities and displacement was included in the scope, particularly for local ports.
- 2) Regional employment training opportunities are not within scope.

Recommendations

Job security, working conditions, opportunities for employment advancement or simply being in paid employment, impact on health and wellbeing.

The ES should ensure socioeconomic effects on local commercial fishing is included within the scope. This should include the socioeconomic effect on the ports that receive the catch (Shoreham, Portsmouth and Brixham).

Although the proposal indicates that the worker requirement during all phases of the project is relatively small, the ES should consider scoping in regional employment training opportunities.

Land use

- 1) Further details about the onshore substation are required, once the location is finalised.

Recommendation

The ES should include consideration of physical and mental health impact and effects for sensitive receptors, the local population and visitors during construction, operation and maintenance, and decommissioning of the onshore substation. This is not limited to but should include: change in access to greenspace, impact on physical activity and recreation opportunities, community severance (if applicable, given location and size of substation), displacement of business or residence (if applicable), traffic and transport.

Air Quality and Contaminated Land

PHE welcomes the proposals to assess the public health impacts the development may have on air quality and contaminated land. We agree in principal with the methodology and scope proposed and will comment further once the detailed assessments are available at the next stage of the consultation process.

Recommendation

Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level and that reducing public exposures of non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure), maximise co-benefits (such as physical exercise). We encourage their

consideration during development design, environmental and health impact assessment, and development consent

Electric and Magnetic Fields

It is noted that the current proposals do not appear to consider possible health impacts of Electric and Magnetic Fields (EMF). We are aware that the Human health impacts of project associated EMF are likely to be managed or eliminated, in line with the current guidance.

Recommendation

We request that the ES clarifies this and if necessary, the proposer should confirm either that the proposed development does not impact any receptors from potential sources of EMF; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES.

In addition to the detailed comments above please see appendix 1 below for our standard recommendations and requirements relating to Environmental Impact Assessments

Yours sincerely

For and on behalf of Public Health England

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

Introduction

The Planning Inspectorate's Advice Note 11: Working with Public Bodies covers many of the generic points of interaction relevant to the Planning Inspectorate and Public Health England (PHE). The purpose of this Annex is to help applicants understand the issues that PHE expect to see addressed by applicants preparing an Environmental Statement (ES) as part of their Nationally Significant Infrastructure Planning (NSIP) submission.

We have included a comprehensive outline of the type of issues we would expect to be considered as part of an NSIP which falls under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). PHE encourages applicants to contact us as early in the process as possible if they wish to discuss or clarify any matters relating to chemical, poison, radiation or wider public health.

General Information on Public Health England

PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service. We are an executive agency of the Department of Health and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the National Health Service (NHS) in a professionally independent manner.

We operate across 4 regions in England and work closely with public health professionals in Wales, Scotland and Northern Ireland, and internationally.¹ We have specialist teams advising on specific issues such as the potential impacts of chemicals, air quality, ionising and non-ionising radiation and other factors which may have an impact on public health, as well as on broader issues such as the wider determinants of health, health improvement and health inequalities.

PHE's NSIP related roles and responsibilities and geographical extent

PHE is a statutory consultee in the NSIP process for any *applications likely to involve chemicals, poisons or radiation which could potentially cause harm to people and are likely to affect significantly public health.*² PHE will consider the potential significant effects (direct and indirect) of a proposed development on population and human health and the impacts from chemicals, radiation and environmental hazards.

Under certain circumstances PHE may provide comments on ionising radiation to/on behalf of the Scottish Parliament. If a proposer is submitting a planning application in Scotland which may require advice on radiation you are recommended to contact the appropriate Scottish Planning Authority for advice on how to proceed.

In the case of applications in Wales, PHE remains a statutory consultee but the regime applies to a more limited range of development types. For NSIP applications likely to affect land in Wales, an applicant should still consult PHE but, additionally will be required to consult the Welsh Ministers.

Role of Public Health England and NSIP with respect to Environmental Impact Assessments

PHE has a statutory role as a consultation body under the EIA Regulations. Where an applicant has requested a scoping opinion from the Planning Inspectorate³ in relation to a proposed NSIP, PHE will be consulted by the Planning Inspectorate about the scope, and level of detail, of the information to be provided in the ES and will be under a duty to make information available to the applicant. PHE's standard recommendations in response to EIA scoping consultations are below.

¹ <https://www.gov.uk/government/organisations/public-health-england/about#priorities>

² The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

³ The scoping process is administered and undertaken by the Planning Inspectorate on behalf of the Secretary of State

PHE also encourages applicants to discuss with them the scope of the ES at an early stage to explore, for example, whether careful site selection or other design issues could minimise or eliminate public health impacts or to outline the requirement for, scope and methodology of any assessments related to public health.

PHE's recommendations to applicants regarding Environmental Impact Assessments General approach

Applicants are reminded that Section 5(2)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 specifically includes a requirement that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health.

PHE is of the opinion that this requirement encompasses the wider determinants of public health, as well as chemicals, poisons and radiation. Further information on PHE's recommendations and requirements is included below.

It is the role of the applicant to prepare the ES. PHE provides advice relating to EIA within this document and during the NSIP consultation stages.

When preparing an ES the applicant should give consideration to best practice guidance such as the Government's Handbook for scoping projects: environmental impact assessment⁴, IEMA Guide to Delivering Quality Developments⁵, and Guidance: on Environmental Impact Assessment⁶

The Planning Inspectorate's Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements also provide guidance to applicants and other persons with interest in the EIA process as it relates to NSIPs.

It is important that the submitted ES identifies and assesses the potential public health impacts of the activities at, and emissions from, the development.

PHE understands that there may be separate sections of the ES covering the assessment of impacts on air, land, water and so on, but expects an ES to include a specific section summarising potential impacts on population and health. This section should bring together and interpret the information from other assessments as necessary. The health and population impacts section should address the following steps.

1. Screening: Identify and significant effects.
 - a. Summarise the methodologies used to identify health impacts, assess significance and sources of information
 - b. Evaluate any reference standards used in carrying out the assessment and in evaluating health impacts (e.g., environmental quality standards)
 - c. Where the applicant proposes the 'scoping out' of any effects a clear rationale and justification should be provided along with any supporting evidence.

2. Baseline Survey :

⁴ <https://www.gov.uk/government/publications/handbook-for-scoping-projects-environmental-impact-assessment>

⁵ <https://www.iema.net/assets/newbuild/documents/Delivering%20Quality%20Development.pdf>

⁶ <https://www.gov.uk/guidance/environmental-impact-assessment#the-purpose-of-environmental-impact-assessment>

- a. Identify information needed and available, Evaluate quality and applicability of available information
 - b. Undertake assessment
3. Alternatives:
- a. Identify and evaluate any realistic alternative locations, routes, technology etc.
4. Design and assess possible mitigation
- a. Consider and propose suitable corrective actions should mitigation measures not perform as effectively predicted.
5. Impact Prediction: Quantify and Assess Impacts:
- a. Evaluate and assess the extent of any positive and negative effects of the development. Effects should be assessed in terms of likely health outcomes, including those relating to the wider determinants of health such as socio-economic outcomes, in addition to health outcomes resulting from exposure to environmental hazards. Mental health effects should be included and given equivalent weighting to physical effects.
 - b. Clearly identify any omissions, uncertainties and dependencies (e.g., air quality assessments being dependant on the accuracy of traffic predictions)
 - c. Evaluate short-term impacts associated with the construction and development phase
 - d. Evaluate long-term impacts associated with the operation of the development
 - e. Evaluate any impacts associated with decommissioning
 - f. Evaluate any potential cumulative impacts as a result of the development, currently approved developments which have yet to be constructed, and proposed developments which do not currently have development consent
6. Monitoring and Audit (not a statutory requirement)
- a. Identify key modelling predictions and mitigation impacts and consider implementing monitoring and audit to assess their accuracy / effectiveness.

Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made, the applicant should fully explain and justify their rationale in the submitted documentation.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, the EIA process should start at the stage of site selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES⁷.

Human and environmental receptors

The applicant should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land.

Identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities, as well as other vulnerable population groups such as those who are young, older, with disabilities or long-term conditions, or on low incomes) in the area(s) which may be

⁷ DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

affected by emissions, this should include consideration of any new receptors arising from future development

Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions or activities due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions (point source, fugitive and traffic-related) and activities. An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from industrial installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding the assessment of emissions from any type of development in order that the ES provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these should:

- include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- encompass the combined impacts of all pollutants which may be emitted by the development with all pollutants arising from associated development and transport, considered in a single holistic assessment (ie, of overall impacts)
- include Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- consider the construction, operational, and decommissioning phases
- consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- fully account for fugitive emissions
- include appropriate estimates of background levels
 - when assessing the human health risk of a chemical emitted from a facility or operation, background exposure to the chemical from other sources should be taken into account
- identify cumulative and incremental impacts (ie, assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (ie, rail, sea, and air)
- include consideration of local authority, Environment Agency, Natural Resources Wales, Defra national network, and any other local site-specific sources of monitoring data
- compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium. Where available, the most recent UK standards for the appropriate media (ie,

air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants

- where UK standards or guideline values are not available, use those recommended by the European Union or World Health Organization:
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (eg, a Tolerable Daily Intake or equivalent)
 - This should consider all applicable routes of exposure (eg, include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion)
- when quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants, PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach¹ is used
- identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions. This should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (eg, for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the applicant should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no threshold below which health effects do not occur) the **benefits** of development options which reduce population exposure should be evaluated.

Additional points specific to emissions to air

When considering baseline conditions (of existing air quality) and the assessment and future monitoring of impacts, these should include:

- consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst-case conditions)
- modelling taking into account local topography, congestion and acceleration
- evaluation of the public health **benefits** of development options which reduce air pollution – even below limit values – as pollutants such as nitrogen dioxide and particulate matter show no threshold below which health effects do not occur

Additional points specific to emissions to water

When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should:

- include assessment of potential impacts on human health and not focus solely on ecological impacts
- identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.)
- assess the potential off-site effects of emissions to groundwater (eg, on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure

- include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

Land quality

We would expect the applicant to provide details of any hazardous contamination present on site (including ground gas) as part of a site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed⁸ and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The applicant should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the development the ES should assess:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

If the development includes wastes delivered to the installation:

- Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation

Other aspects

Within the ES, PHE would expect to see information about how the applicant would respond to accidents with potential off-site emissions (e.g., flooding or fires, spills, leaks or releases off-site).

Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

PHE would expect the applicant to consider the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations: both in terms of their applicability to the development itself, and the development's potential to impact on, or be impacted by, any nearby installations themselves subject to these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report⁹, jointly published by Liverpool John Moores University and the Health

⁸ Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

⁹ Available from: <http://www.cph.org.uk/wp-content/uploads/2012/08/health-risk-perception-and-environmental-problems--summary-report.pdf>

Protection Agency (HPA), examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: “*Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible.*” PHE supports the inclusion of this information within ES’ as good practice.

Electromagnetic fields (EMF)

This advice relates to electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available on the Gov.UK website.¹⁰

There is a potential health impact associated with the electric and magnetic fields around substations, overhead power lines and underground cables. The field strengths tend to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

A voluntary code of practice is published which sets out key principles for complying with the ICNIRP guidelines.¹¹

Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available.^{12, 13}

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect, based on an accompanying comprehensive review of the scientific evidence, was published in 2004 by the National Radiological Protection Board (NRPB), one of PHE’s predecessor organisations¹⁴

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented as expressed in the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):¹⁵

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people

¹⁰ <https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

¹¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

¹² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

¹³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf

¹⁴ <http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

¹⁵ http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/PublicHealth/Healthprotection/DH_4089500

with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to electric fields. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m⁻¹ (kilovolts per metre) and 100 µT (microtesla). The reference level for magnetic fields changes to 200 µT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with underlying basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

The Stakeholders Advisory Group on ELF EMFs (SAGE) was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government.¹⁶

Relevant here is SAGE's 2007 First Interim Assessment, which makes several recommendations concerning high voltage power lines. Government supported the implementation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines in which development would be restricted on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available on the national archive website.¹⁷

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages.

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection¹⁸ (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in

¹⁶ <http://www.emfs.info/policy/sage/>

¹⁷

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

¹⁸ These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

the Euratom Basic Safety Standards¹⁹ (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

As part of the EIA process PHE expects applicants to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would, as part of the EIA process, expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group).

Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated²⁰.

The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate.

The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012'²¹

It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment, undertaken as part of the EIA, should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed.

Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities²². PHE advises that assessments of radiological impact during the operational phase

¹⁹ Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

²⁰ HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at <https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients>

²¹ The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA).

Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

²² HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years.

The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased.

For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose.

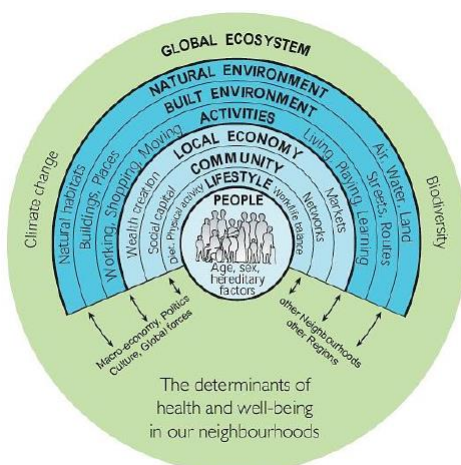
For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered.

The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

Wider Determinants of Health

World Health Organization (WHO's) defines health as "a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity" (WHO, 1948).

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people.



Barton and Grant²³

PHE recognises that evaluating an NSIP's impacts on health through the wider determinants is more complex than assessing a project's direct impacts against clearly defined regulatory protections (e.g.

²³ Barton H, Grant M. A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 2006; 126(6): 252-3.

protected species). However, this does not mean that their assessment should be side-lined; with the 2017 EIA Regulations clarifying that the likely significant effects of a development proposal on human health must be assessed.

We accept that the relevance of these topics and associated impacts will vary depending on the nature of the proposed development and in order to assist applicants PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. PHE has developed a list of 21 determinants of health and wellbeing under four broad themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements (NPS). If the applicant proposes to scope any areas out of the assessment, they should provide clear reasoning and justification.

The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Methodology

PHE will expect assessments to set out the methodology used to assess each determinant included in the scope of the assessment. In some instances, the methodologies described may be established and refer to existing standards and/or guidance. In other instances, there may be no pre-defined methodology, which can often be the case for the wider determinants of health; as such there should be an application of a logical impact assessment method that:

- identifies effected populations vulnerable to impacts from the relevant determinant
- establishes the current baseline situation
- identifies the NSIP's potential direct and indirect impacts on each population
- if impacts are identified, evaluates whether the potential impact is significant in relation to the affected population
- identifies appropriate mitigation to minimise impacts or the subsequent effects on health
- identifies opportunities to achieve benefits from the scheme
- identifies appropriate monitoring programmes

Currently there is no standard methodology for assessing the population and human health effects of infrastructure projects, but a number of guides exist, including:

- Institute of Environmental Management and Assessment, 2017: Health in Environmental Assessment, a primer for a proportionate approach;
- NHS London Healthy Urban Development Unit (HUDU), 2015. Healthy Urban Planning Checklist and Rapid Health Impact Assessment Tool;
- Wales Health Impact Assessment Unit, 2012: HIA a practical guide;
- National Mental Wellbeing Impact Assessment Development Unit 2011: Mental Wellbeing Impact Assessment Toolkit;

Determining significant effects

Neither the EIA regulations nor the National Policy Statements provide a definition of what constitutes a 'significant' effect, and so PHE have derived a list of factors which it will take into consideration in the assessment of significance of effects, as outlined below. these list of factors should be read in conjunction with guidance from the above guides.

1. Sensitivity:

Is the population exposed to the NSIP at particular risk from effects on this determinant due to pre-existing vulnerabilities or inequalities (for example, are there high numbers in the local population of people who are young, older, with disabilities or long-term conditions, or on a low income)? Will the NSIP widen existing inequalities or introduce new inequalities in relation to this determinant?

2. Magnitude:

How likely is the impact on this determinant to occur? If likely, will the impact affect a large number of people / Will the impact affect a large geographic extent? Will the effects be frequent or continuous? Will the effects be temporary or permanent and irreversible?

3. Cumulative effects:

Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone?

What are the cumulative effects of the impacts of the scheme on communities or populations. Individual impacts individually may not be significant but in combination may produce an overall significant effect.

4. Importance:

Is there evidence for the NSIP's effect on this determinant on health? Is the impact on this determinant important in the context of national, regional or local policy?

5. Acceptability:

What is the local community's level of acceptance of the NSIP in relation to this determinant? Do the local community have confidence that the applicants will promote positive health impacts and mitigate against negative health effects?

6. Opportunity for mitigation:

If this determinant is included in the scope for the EIA is there an opportunity to enhance any positive health impacts and/or mitigate any negative health impacts?

Scoping

The scoping report may determine that some of the wider determinants considered under human and population health can be scoped out of the EIA. If that, should be the case, detailed rationale and supporting evidence for any such exclusions must be provided. PHE will expect an assessment to have considered all of the determinants listed in Table1 of Appendix 1 as a minimum.

Vulnerable groups

Certain parts of the population may experience disproportionate negative health effects as a result of a development. Vulnerable populations can be identified through research literature, local population health data or from the identification of pre-existing health conditions that increase vulnerability.

The on health and wellbeing and health inequalities of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. Some protected groups are more likely to have elevated vulnerability associated with social and economic disadvantages. Consideration should be given to language or lifestyles that influence how certain populations are affected by impacts of the proposal, for example non-English speakers may face barriers to accessing information about the works or expressing their concerns.

Equality Impact Assessments (EqIA) are used to identify disproportionate effects on Protected Groups (defined by the Equality Act, 2010), including health effects. The assessments and findings of the Environmental Statement and the EqIA should be cross reference between the two documents, particularly to ensure the assessment of potential impacts for health and inequalities and that resulting mitigation measures are mutually supportive.

The Wales Health Impact Assessment Support Unit (WHIASU), provides a suggested list of vulnerable groups

Age related groups

- Children and young people
- Older people

Income related groups

- People on low income
- Economically inactive
- Unemployed/workless
- People who are unable to work due to ill health

Groups who suffer discrimination or other social disadvantage

- People with physical or learning disabilities/difficulties
- Refugee groups
- People seeking asylum
- Travellers
- Single parent families
- Lesbian and gay and transgender people
- Black and minority ethnic groups
- Religious groups

Geographical groups

- People living in areas known to exhibit poor economic and/or health indicators
- People living in isolated/over-populated areas
- People unable to access services and facilities

Mental health

PHE supports the use of the broad definition of health proposed by the World Health Organisation (WHO). Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. NSIP schemes can be of such scale and nature that will impact on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the impacts on mental health, including suicide, is required. The **Mental Well-being Impact Assessment (MWIA)** could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets

Perceptions about the proposed scheme may increase the risk of anxiety or health effects by perceived effects. "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard.

Evidence base and baseline data

An assessment should be evidence based, using published literature to identify determinants and likely health effects. The strength of evidence identifying health effects can vary, but where the evidence for an association is weak it should not automatically be discounted.

There will be a range of publicly available health data including:

- National datasets such as those from the Office of National Statistics,
- Public Health England (PHE), including the fingertips data sets,
- Non-governmental organisations,

- Local public health reports, such as the Joint Strategic Needs Assessment, Health and Wellbeing Strategies;
- Consultation with local authorities, including local authority public health teams;
- Information received through public consultations

Mitigation

If the assessment has identified that significant negative effects are likely to occur with respect to the wider determinants of health, the assessment should include a description of planned mitigation measures the applicant will implement to avoid or prevent effects on the population.

Mitigation and/or monitoring proposals should be logical, feasible and have a clear governance and accountability framework indicating who will be responsible for implementation and how this will be secured during the construction and/or operation of the NSIP.

Positive benefits from the scheme

The scale of many NSIP developments will generate the potential for positive impacts on health and wellbeing; however, delivering such positive health outcomes often requires specific enabling or enhancement measures. For example, the construction of a new road network to access an NSIP site may provide an opportunity to improve the active transport infrastructure for the local community. PHE expects developments to consider and report on the opportunity and feasibility of positive impacts. These may be stand alone or be considered as part of the mitigation measures.

Monitoring

PHE expects an assessment to include consideration of the need for monitoring. It may be appropriate to undertake monitoring where:

- Critical assumptions have been made
- There is uncertainty about whether negative impacts are likely to occur as it may be appropriate to include planned monitoring measures to track whether impacts do occur.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact and provide useful and timely feedback that would allow action to be taken should negative impacts occur

How to contact PHE

If you wish to contact us regarding an existing or potential NSIP application please email:

nsipconsultations@phe.gov.uk

[Appendix 1](#)

[Table 1 – Wider determinants of health and wellbeing](#)

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
Wider determinants of health and wellbeing			
<p>Access to :</p> <ul style="list-style-type: none"> • local public and key services and facilities. • Good quality affordable housing. • Healthy affordable food. • The natural environment. • The natural environment within the urban environment. • Leisure, recreation and physical activities within the urban and natural environments. 	<ul style="list-style-type: none"> • Accessibility. • Access to/by public transport. • Opportunities for access by cycling and walking. • Links between communities. • Community severance. • Connections to jobs. • Connections to services, facilities and leisure opportunities. 	<ul style="list-style-type: none"> • Employment opportunities, including training opportunities. • Local business activity. • Regeneration. • Tourism and leisure industries. • Community/social cohesions and access to social networks. • Community engagement. 	<ul style="list-style-type: none"> • Land use in urban and/or /rural settings. • Quality of Urban and natural environments

1) **Access**

a. Access to local, public and key services and facilities

Access to local facilities can increase mobility and social participation. Body mass index is significantly associated with access to facilities, including factors such as the mix and density of facilities in the area. The distance to facilities has no or only a small effect on walking and other physical activities. Access to recreational facilities can increase physical activity, especially walking for recreation, reduce body weight, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions.

Local services include health and social care, education, employment, and leisure and recreation. Local facilities include community centres, shops, banks/credit unions and Post Offices. Services and facilities can be operated by the public, private and/or voluntary

sectors. Access to services and facilities is important to both physical and mental health and wellbeing. Access is affected by factors such as availability, proximity to people's place of residence, existence of transport services or active travel infrastructure to the location of services and facilities, and the quality of services and facilities.

The construction or operation of an NSIP can affect access adversely: it may increase demand and therefore reduce availability for the existing community; during construction, physical accessibility may be reduced due to increased traffic and/or the blockage of or changes to certain travel routes. It is also possible that some local services and facilities are lost due to the land-take needed for the NSIP.

Conversely if new routes are built or new services or facilities provided the NSIP may increase access. NSIPs relating to utilities such as energy and water can maintain, secure or increase access to those utilities, and thereby support health and wellbeing.

b. Access to good-quality affordable housing

Housing refurbishment can lead to an improvement in general health and reduce health inequalities. Housing improvements may also benefit mental health. The provision of diverse forms and types of housing is associated with increased physical activity. The provision of affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among people from low-income groups. For vulnerable groups, the provision of affordable housing can lead to improvements in social, behavioural and health related outcomes. For some people with long term conditions, the provision of secure and affordable housing can increase engagement with healthcare services, which can lead to improved health-related outcomes. The provision of secure and affordable housing can also reduce engagement in risky health-related behaviours. For people who are homeless, the provision of affordable housing increases engagement with healthcare services, improves quality of life and increases employment, and contributes to improving mental health.

Access to housing meets a basic human need, although housing of itself is not necessarily sufficient to support health and wellbeing: it is also important that the housing is of good quality and affordable. Factors affecting the quality of housing include energy efficiency (eg effective heating, insulation), sanitation and hygiene (eg toilet and bathroom), indoor air quality including ventilation and the presence of damp and/or mould, resilience to climate change, and overcrowding. The affordability of housing is important because for many people, especially people on a low income, housing will be the largest monthly expense; if the cost of housing is high, people may not be able to meet other needs such as the need for heating in winter or food. Some proposals for NSIPs include the provision of housing, which could be beneficial for the health and wellbeing of the local population. It is also possible that some housing will be subject to a compulsory purchase order due to the land-take needed for an NSIP.

c. Access to affordable healthy food

Access to healthy food is related to the provision of public and active transport infrastructure and the location and proximity of outlets selling healthier food such as fruit and vegetables. For the general population, increased access to healthy, affordable food through a variety of outlets (shops, supermarkets, farmers' markets and community gardens) is associated with improved dietary behaviours, including attitudes towards healthy eating and food purchasing behaviour, and improved adult weight. Increased access to unhealthier food retail outlets is associated with increased weight in the general population and increased obesity and unhealthy eating behaviours among children living in low-income areas. Urban agriculture can improve attitudes towards healthier food and

increase fruit and vegetable consumption.

Factors affecting access to healthy affordable food include whether it is readily available from local shops, supermarkets, markets or delivery schemes and/or there are opportunities to grow food in local allotments or community gardens. People in environments where there is a high proportion of fast food outlets may not have easy access to healthy affordable food.

d. Access to the natural environment

Availability of and access to safe open green space is associated with increased physical activity across a variety of behaviours, social connectedness, childhood development, reduced risk of overweight and obesity and improved physical and mental health outcomes. While the quantity of green space in a neighbourhood helps to promote physical activity and is beneficial to physical health, eg lower rates of mortality from cardiovascular disease and respiratory disease in men, the availability of green environments is likely to contribute more to mental health than to physical health: the prevalence of some disease clusters, particularly anxiety and depression, is lower in living environments which have more green space within a 1-km radius.

The proximity, size, type, quality, distribution, density and context of green space are also important factors. Quality of green space may be a better predictor of health than quantity, and any type of green space in a neighbourhood does not necessarily act as a venue for, or will encourage, physical activity. 'Walkable' green environments are important for better health, and streetscape greenery is as strongly related to self-reported health as green areas. Residents in deprived areas are more likely to perceive access to green space as difficult, to report poorer safety, to visit the green space less frequently and to have lower levels of physical activity. The benefits to health and wellbeing of blue space include lower psychological distress.

The natural environment includes the landscape, waterscape and seascape. Factors affecting access include the proximity of the natural environment to people's place of residence, the existence of public transport services or active travel infrastructure to the natural environment, the quality of the natural environment and feelings of safety in the natural environment. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local area. It is also possible that green or blue infrastructure will be lost due to the land-take needed for the NSIP.

e. Access to the natural environment within the urban environment

Public open spaces are key elements of the built environment. Ecosystem services through the provision of green infrastructure are as important as other types of urban infrastructure, supporting physical, psychological and social health, although the quality and accessibility of green space affects its use, C19, ethnicity and perceptions of safety. Safe parks may be particularly important for promoting physical activity among urban adolescents. Proximity to urban green space and an increased proportion of green space are associated with decreased treatment of anxiety/mood disorders, the benefits deriving from both participation in usable green space near to home and observable green space in the neighbourhood. Urban agriculture may increase opportunities for physical activity and social connections.

A view of 'greenery' or of the sea moderates the annoyance response to noise. Water is associated with positive perceptive experiences in urban environments, with benefits for health such as enhanced contemplation, emotional bonding, participation and physical activity. Increasing biodiversity in urban environments, however, may promote the

introduction of vector or host organisms for infectious pathogens, eg green connectivity may potentiate the role of rats and ticks in the spread of disease, and bodies of water may provide habitats for mosquitoes. Owing to economic growth, population size and urban and industrial expansion in the EU, to maintain ecosystem services at 2010 levels, for every additional percentage increase in the proportion of 'artificial' land, there needs to be a 2.2% increase in green infrastructure.

The natural environment within the urban environment includes the provision of green space and blue space in towns and cities. Factors involved in access include the proximity of the green and/or blue space to people's place of residence, the existence of transport services or active travel infrastructure to the green and/or blue space, the quality of the green and/or blue space and feelings of safety when using the green and/or blue space. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local urban environment. It is also possible that green or blue infrastructure in the urban environment will be lost due to the land-take needed for the NSIP.

- f. Access to leisure, recreation and physical activity opportunities within the urban and natural environments.

Access to recreational opportunities, facilities and services is associated with risk factors for long-term disease; it can increase physical activity, especially walking for recreation, reduce body mass index and overweight and obesity, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. It can also enhance social connectedness. Children tend to play on light-traffic streets, whereas outdoor activities are less common on high-traffic streets. A perception of air pollution can be a barrier to participating in outdoor physical activity. There is a positive association between urban agriculture and increased opportunities for physical activity and social connectivity. Gardening in an allotment setting can result in many positive physical and mental health-related outcomes. Exercising in the natural environment can have a positive effect on mental wellbeing when compared with exercising indoors.

Leisure and recreation opportunities include opportunities that are both formal, such as belonging to a sports club, and informal, such as walking in the local park or wood. Physical activity opportunities include routine activity as part of daily life, such as walking or cycling to work, and activity as part of leisure or recreation, such as playing football. The construction of an NSIP may enhance the opportunities available for leisure and recreation and physical activity through the provision of new or improved travel routes, community infrastructure and/or green or blue space. Conversely, construction may reduce access through the disruption of travel routes to leisure, recreation and physical activity opportunities.

2) **Traffic and Transport**

- a. Accessibility

Walkability, regional accessibility, pavements and bike facilities are positively associated with physical activity and negatively related to body weight and high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. Body mass index is associated with street network accessibility and slope variability.

Accessibility in relation to transport and travel has several aspects including whether potential users can gain physical access to the infrastructure and access to the services

the infrastructure provides. The design and operation of transport infrastructure and the associated services should take account of the travel needs of all potential users including people with limited mobility. People whose specific needs should be considered include pregnant women, older people, children and young people and people with a disability. Other aspects of transport infrastructure affecting accessibility include safety and affordability, both of which will affect people's ability to travel to places of employment and/or key local services and facilities and/or access their social networks.

b. Access to / by public transport

Provision of high-quality public transport is associated with higher levels of active travel among children and among people commuting to work, with a decrease in the use of private cars. Combining public transport with other forms of active travel can improve cardiovascular fitness. Innovative or new public transport interventions may need to be marketed and promoted differently to different groups of transport users, eg by emphasising novelty to car users while ensuring that the new system is seen by existing users as coherently integrated with existing services.

Transport facilitates access to other services, facilities and amenities important to health and wellbeing. Public transport is any transport open to members of the public including bus, rail and taxi services operated by the public, private or community sectors. For people who do not have access to private transport, access to public transport is important as the main agency of travel especially for journeys >1 mile. Access to public transport is not sufficient, however, and access by public transport needs to be taken into account: public transport services should link places where people live with the destinations they need or want to visit such as places of employment, education and healthcare, shops, banks and leisure facilities. Other aspects of access to public transport include affordability, safety, frequency and reliability of services.

c. Opportunities for / access by cycling & walking

Walking and cycling infrastructure can enhance street connectivity, helping to reduce perceptions of long-distance trips and providing alternative routes for active travel. Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality. The perception of air pollution, however, appears to be a barrier to participating in active travel.

Perceived or objective danger may also have an adverse effect on cycling and walking, both of which activities decrease with increasing traffic volume and speed, and cycling for leisure decreases as local traffic density increases. Health gains from active travel policies outweigh the adverse effects of road traffic incidents. New infrastructure to promote cycling, walking and the use of public transport can increase the time spent cycling on the commute to work, and the overall time spent commuting among the least-active people. Active travel to work or school can be associated with body mass index and weight, and may reduce cardiovascular risk factors and improve cardiovascular outcomes. The distance of services from cycle paths can have an adverse effect on cycling behaviour, whereas mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

d. Links between communities

Social connectedness can be enhanced by the provision of public and active transport

infrastructure and the location of employment, amenities, facilities and services.

e. Community severance

In neighbourhoods with high volumes of traffic, the likelihood of people knowing and trusting neighbours is reduced.

f. Connections to jobs

The location of employment opportunities and the provision of public and active transportation infrastructure are associated with risk factors for long-term disease such as physical activity. Good pedestrian and cycling infrastructure can promote commuting physical activity. Improved transport infrastructure has the potential to shift the population distribution of physical activity in relation to commuting, although a prerequisite may be a supportive social environment. Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

The ease of access to employment, shops and services including the provision of public and active transport are important considerations and schemes should take any opportunity to improve infrastructure to promote cycling, walking and the use of public transport

g. Connections to services, facilities and leisure opportunities

Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking. Access to recreational opportunities and the location of shops and services are associated with risk factors for long-term disease such as physical activity, access to healthy food and social connectedness. Increased distance of services from cycle paths can have an adverse effect on cycling behaviour.

3) **Socio Economic**

a. Employment opportunities including training opportunities

Employment is generally good for physical and mental health and well-being, and worklessness is associated with poorer physical and mental health and well-being. Work can be therapeutic and can reverse the adverse health effects of unemployment for healthy people of working age, many disabled people, most people with common health problems and social security beneficiaries. Account must be taken of the nature and quality of work and its social context and jobs should be safe and accommodating. Overall, the beneficial effects of work outweigh the risks of work and are greater than the harmful effects of long-term unemployment or prolonged sickness absence. Employment has a protective effect on depression and general mental health.

Transitions from unemployment to paid employment can reduce the risk of distress and improve mental health, whereas transitions into unemployment are psychologically distressing and detrimental to mental health. The mental health benefits of becoming employed are also dependent on the psychosocial quality of the job, including level of control, demands, complexity, job insecurity and level of pay: transition from unemployment to a high-quality job is good for mental health, whereas transition from unemployment to a low-quality job is worse for mental health than being unemployed. For people receiving social benefits, entry into paid employment can improve quality of life and self-rated health (physical, mental, social) within a short time-frame. For people receiving disability benefits, transition into employment can improve mental and physical health. For people with mental health needs, entry into employment reduces the use of mental health

services.

For vocational rehabilitation of people with severe mental illness (SMI), Supported Employment is more effective than Pre-vocational Training in helping clients obtain competitive employment; moreover, clients in Supported Employment earn more and work more hours per month than those in Pre-vocational Training.

b. Local Business Activity

It is important to demonstrate how a proposed development will contribute to ensuring the vitality of town centres. Schemes should consider the impact on local employment, promote beneficial competition within and between town centres, and create attractive, diverse places where people want to live, visit and work

In rural areas the applicant should assess the impact of the proposals on a prosperous rural economy, demonstrate how they will support the sustainable growth and expansion of all types of business and enterprise in rural areas, promoting the development and diversification of agricultural and other land based rural businesses.

c. Regeneration

Following rebuilding and housing improvements in deprived neighbourhoods, better housing conditions are associated with better health behaviours; allowing people to remain in their neighbourhood during demolition and rebuilding is more likely to stimulate life-changing improvements in health behaviour than in people who are relocated. The partial demolition of neighbourhoods does not appear to affect residents' physical or mental health. Mega-events, such as the Olympic Games, often promoted on the basis of their potential legacy for regeneration, appear to have only a short-term impact on mental health.

d. Tourism and Leisure Industries

The applicant should assess the impact of the proposed development on retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. In rural locations assessment and evaluation of potential impacts on sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors should be undertaken.

e. Community / social cohesion and access to social networks

The location of employment, shops and services, provision of public and active transport infrastructure and access to open space and recreational opportunities are associated with social connectedness. Access to local amenities can increase social participation. Neighbourhoods that are more walkable can increase social capital. Urban agriculture can increase opportunities for social connectivity. Infrastructure developments, however, can affect the quality of life of communities living in the vicinity, mediated by substantial community change, including feelings of threat and anxiety, which can lead to psychosocial stress and intra-community conflict.

f. Community engagement

Public participation can improve environmental impact assessments, thereby increasing the total welfare of different interest groups in the community. Infrastructure development may be more acceptable to communities if it involves substantial public participation.

4) Land Use

a. Land use in urban and / or rural settings

Land-use mix including infrastructure:

Land use affects health not only by shaping the built environment, but also through the balance of various types of infrastructure including transport. Vulnerable groups in the population are disproportionately affected by decisions about land use, transport and the built environment. Land use and transport policies can result in negative health impacts due to low physical activity levels, sedentary behaviours, road traffic incidents, social isolation, air pollution, noise and heat. Mixed land use can increase both active travel and physical activity. Transportation walking is related to land-use mix, density and distance to non-residential destinations; recreational walking is related to density and mixed use. Using modelling, if land-use density and diversity are increased, there is a shift from motorised transport to cycling, walking and the use of public transport with consequent health gain from a reduction in long-term conditions including diabetes, cardiovascular disease and respiratory disease.

Proximity to infrastructure:

Energy resource activities relating to oil, gas and coal production and nuclear power can have a range of negative effects on children and young people. Residing in proximity to motorway infrastructure can reduce physical activity. For residents in proximity to rail infrastructure, annoyance is mediated by concern about damage to their property and future levels of vibration. Rural communities have concerns about competing with unconventional gas mining for land and water for both the local population and their livestock."

b. Quality of urban and natural environments

Long-term conditions such as cardiovascular disease, diabetes, obesity, asthma and depression can be moderated by the built environment. People in neighbourhoods characterised by high 'walkability' walk more than people in neighbourhoods with low 'walkability' irrespective of the land-use mix. In neighbourhoods associated with high 'walkability' there is an increase in physical activity and social capital, a reduction in overweight and blood pressure, and fewer reports of depression and of alcohol abuse. The presence of walkable land uses, rather than their equal mixture, relates to a healthy weight. Transportation walking is at its highest levels in neighbourhoods where the land-use mix includes residential, retail, office, health, welfare and community, and entertainment, culture and recreation land uses; recreational walking is at its highest levels when the land-use mix includes public open space, sporting infrastructure and primary and rural land uses. Reduced levels of pollution and street connectivity increase participation in physical activity.

Good-quality street lighting and traffic calming can increase pedestrian activity, while traffic calming reduces the risk of pedestrian injury. 20-mph zones and limits are effective at reducing the incidence of road traffic incidents and injuries, while good-quality street lighting may prevent them. Public open spaces within neighbourhoods encourage physical activity, although the physical activity is dependent on different aspects of open space, such as proximity, size and quality. Improving the quality of urban green spaces and parks can increase visitation and physical activity levels.

Living in a neighbourhood overlooking public areas can improve mental health, and residential greenness can reduce the risk of cardiovascular mortality. Crime and safety issues in a neighbourhood affect both health status and mental health. Despite the complexity of the relationship, the presence of green space has a positive effect on crime,

and general environmental improvements may reduce the fear of crime. Trees can have a cooling effect on the environment – an urban park is cooler than a non-green site. Linking road infrastructure planning and green infrastructure planning can produce improved outcomes for both, including meeting local communities' landscape sustainability objectives.

Rampion 2 Offshore Wind Farm – proposed development by Rampion Extension Development Limited

Royal Mail Group Limited comments on information to be provided in the applicant's Environmental Statement

Introduction

Reference the letter from PINS to Royal Mail dated 6 July 2020 requesting Royal Mail's comments on information that should be provided in Rampion Extension Development Limited Environmental Statement.

Royal Mail's consultants BNP Paribas Real Estate have reviewed the applicant's Scoping Report dated July 2020.

Statutory and operational information about Royal Mail

Under section 35 of the Postal Services Act 2011 (the "Act"), Royal Mail has been designated by Ofcom as a provider of the Universal Postal Service. Royal Mail is the only such provider in the United Kingdom.

The Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service.

The Act includes a set of minimum standards for Universal Service Providers, which Ofcom must secure. The conditions imposed by Ofcom reflect those standards.

Royal Mail is under some of the highest specification performance obligations for quality of service in Europe. Its performance of the Universal Service Provider obligations is in the public interest and this should not be affected detrimentally by any statutorily authorised project.

By sections, 30 and 31 of the Act (read with sections 32 and 33) there is a set of minimum standards for Universal Service Providers, which Ofcom must secure. The conditions imposed by Ofcom reflect those standards. There is, in effect, a statutory obligation on Royal Mail to provide at least one collection from letterboxes and post offices six days a week and one delivery of letters to all 29 million homes and businesses in the UK six days a week (five days a week for parcels). Royal Mail must also provide a range of "end to end" services meeting users' needs, e.g. First Class, Second Class, Special Delivery by 1 pm, International and Redirections services.

The Government imposes financial penalties on Royal Mail if its Universal Service Obligation service delivery targets are not met. These penalties relate to time targets for:

- collections,
- clearance through plant, and
- delivery.

Royal Mail's postal sorting and delivery operations rely heavily on road communications. Royal Mail's ability to provide efficient mail collection, sorting and delivery to the public is sensitive to changes in the capacity of the highway network.

Royal Mail is a major road user nationally. Disruption to the highway network and traffic delays can have direct consequences on Royal Mail's operations, its ability to meet the Universal Service

Obligation and comply with the regulatory regime for postal services thereby presenting a significant risk to Royal Mail's business.

Royal Mail has two properties in the search area and a further sixteen within 11 miles:

BE	Business Entry Name	Address	Distance (miles)
1342	ARUNDEL DO	2 HIGH STREET, BN18 9AA	0
4356	ARUNDEL PAR	THE NORFOLK CENTRE, MILL LANE, BN18 9AH	0
1492	STORRINGTON DO/ST	2 WEST STREET, RH20 4ED	0.8
103	HENFIELD DO	HENFIELD BUSINESS PARK, BN5 9ZZ	2.5
967	BOGNOR REGIS DO	HIGH STREET, PO21 1RG	3.8
1374	LITTLEHAMPTON DO	DOMINION WAY, BN16 3DS	4.1
3750	BOGNOR REGIS PAR	LONDON ROAD CAR PARK, PO21 1UU	4.8
1355	GORING ON SEA DO	MULBERRY LANE, BN12 4QT	6.2
1365	LANCING DO/DMBV	40 NORTH ROAD, BN15 9AA	7.1
1486	HORSHAM DO/ST	HURST ROAD, RH12 13A	7.1
3763	WORTHING UNION PLACE PAR	UNION PLACE, BN11 1LG	7.5
1478	BURGESS HILL DO	6 YORK ROAD, RH15 9TS	7.7
1484	HAYWARDS HEATH DO	MILL GREEN ROAD, RH16 1AA	8.4
1379	WORTHING DO/DMBV	CHAPEL ROAD, BN11 1AA	8.8
4126	LANCING PAR	CULVER ROAD, BN15 9AX	9
1477	BILLINGSHURST DO	66 HIGH STREET, RH14 9NY	9.2
1360	PORTSLADE DO	39 BOUNDARY ROAD, BN41 1AA	11
968	CHICHESTER DO/VSC	80 BASIN ROAD, PO19 1AA	11.1

Please find at Appendix 1 the sites plotted on a map for reference.

Royal Mail's comments on information that should be provided in Rampion Extension Development Limited Environmental Statement

Within the Environmental Statement there is no information regarding construction traffic routes and management for the Scheme. Royal Mail has the following comments / requests:

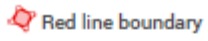
1. Royal Mail requests that the Traffic and Transportation section of the ES includes information on the needs of major road users (such as Royal Mail) and acknowledges the requirement to ensure that major road users are not disrupted through full consultation at the appropriate time in the DCO and development process.
2. Royal Mail requests that it be fully pre-consulted by the applicant and its contractors on any proposed road closures / diversions / alternative access arrangements, hours of working and the content of any Construction Traffic Management Plan. The ES should acknowledge the need for this consultation with Royal Mail and other relevant local businesses / occupiers.

Royal Mail is able to supply the applicant with information on its road usage / trips if required.

Should PINS or Rampion Extension Development Limited have any queries in relation to the above then in the first instance please contact Denise Stephenson (denise.stephenson@royalmail.com) of Royal Mail's Legal Services Team or Alice Stephens (alice.stephens@realestate.bnpparibas) of BNP Paribas Real Estate.

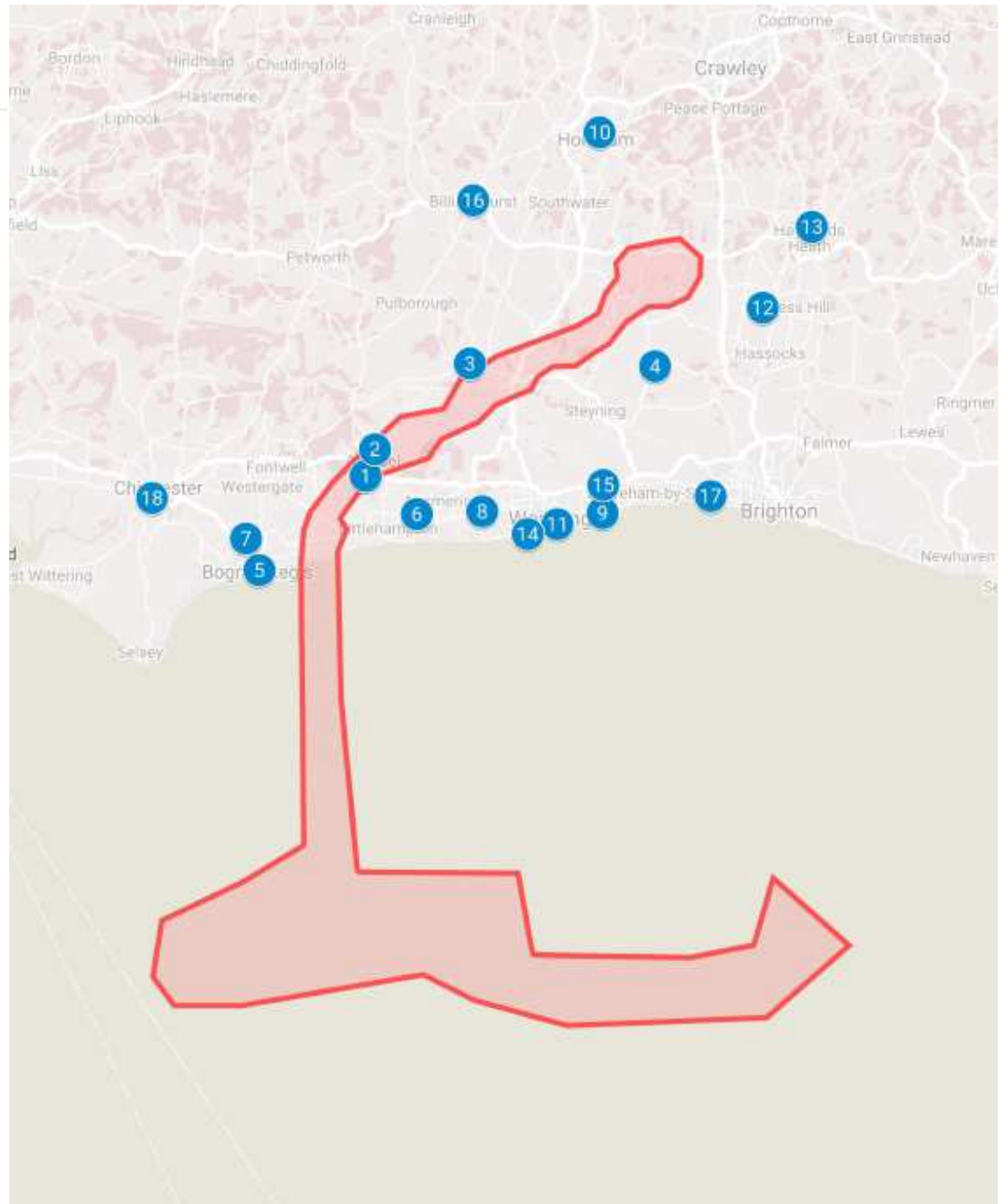
Appendix 1

Scoping Boundary



Affected Properties

- 1 Arundel DO
- 2 Arundel PAR
- 3 Storrington DO/ST
- 4 Henfield DO
- 5 Bognor Regis DO
- 6 Littlehampton DO
- 7 Bognor Regis PAR
- 8 Goring on Sea DO
- 9 Lancing DO/DMBV
- 10 Horsham DO/ST
- 11 Worthing PAR
- 12 Burgess Hill DO
- 13 Haywards Heath DO
- 14 Worthing DO/DMB
- 15 Lancing PAR
- 16 Billingshurst DO
- 17 Portslade DO
- 18 Chichester DO/VSC



Shermanbury Parish Council is in favour of the continued development of wind power as a source of carbon neutral energy generation and supportive of Rampion accessing the National Grid at Bolney. This support is however conditional on the contractors adhering to conditions which minimises the impact on residents, local highways, heritage assets and the rural nature of the parish.

Conditions specific to access of the Bolney site:

- All access to the site should only be from the North. Access to the site via Kent Street must be avoided.
- Repairs to the road and verges must be fully maintained throughout the project to avoid recurrences of Rampion 1 instances.

**Appendix A
Rampion 2 Scoping Commitments Register**

Support	Additional Mitigation
<p>C - 1 The onshore cable route will be completely buried underground for its entire length where practicable.</p> <p>C - 3 At sensitive crossing locations the working width will be reduced as far as practicable.</p> <p>C - 5 Main watercourses, railways and roads that form part of the Strategic Highways Network will be crossed by HDD or other trenchless technology where this represents the best environment solution and is financially and technically feasible (see commitment C-17).</p> <p>C - 6 Where practical sensitive sites will be avoided by the temporary and permanent onshore project footprint including SSSIs, Local Nature Reserves, Local Wildlife Sites, Ancient Woodland, areas of consented development, areas of historic landfill and other known areas of potential contamination, National Trust Land, Listed Buildings and Scheduled monuments.</p>	<p>C - 18 A crossing schedule will be prepared which includes crossing methodology for each crossing of road, rail, PRow and watercourse.</p> <p>Traffic signals on roads should only be in situ for a minimum period of time to avoid or minimize disruption to local residents. Road closures should be avoided at all costs to maintain business, recreation and domestic use.</p> <p>C - 21 Vegetation will be retained where possible. Where necessary vegetation removal will be scheduled over winter to avoid bird breeding season. If not possible for all areas any vegetation removal will be undertaken under supervision and appropriately managed to remove the risk of damaging or destroying active nests, young or eggs. Suitable methods will also be used to ensure vegetation supporting other legally protected species is removed sensitively and in a legally compliant way.</p> <p>All hedge lines should be maintained in their current state. Preservation of the natural environment must be paramount.</p>

C - 7 Post construction the work area will be reinstated to pre-existing condition as far as reasonably practical in line with Defra 2009 Code of Construction Practice (COCP) for the Sustainable Use of Soils on Construction Sites PB13298.

C - 8 During construction and operation refuelling of machinery will be undertaken in line with good practice within a designated area where spillages can be easily contained. Any tanks and pipework will be double skinned and provided with intermediate leak detection equipment. Areas at risk of spillage will be bunded and carefully sited to minimise the risk of hazardous substances entering the drainage system or local watercourses.

C - 10 No blasting is anticipated to be required and trenchless crossings will be undertaken by non-impact methods.

C - 13 In areas (or during periods of adverse weather) there may be the requirement to import aggregates to create a stable surface for construction traffic movements.

Options such as bog matting and geotextiles will be considered by the principal contractor for sensitive sections of the route to reduce impact.

C - 17 Where HDD techniques are not required or are not practical, the crossing of drainage ditches or engineered channels maybe crossed by open cut techniques or the installation of culverts or bridges to allow water to continue flowing. Where this is the case this will be done in accordance with advice notes, guidance documents and Environment Agency Pollution Prevention Guidelines (PPGs). Appropriate environmental permits or land drainage consents will be applied for works from the Environment Agency (e.g. for Main Rivers, works on or near

C - 26 Where noisy activities are planned and may cause disturbance, the use of mufflers, acoustic barriers and other suitable solutions will be applied.

Restrictions on times for noisy activities must not be subject to variation or extension of hours.

C - 32 Signage and/or temporary PRow/footpath diversions will be provided during construction.

Footpath routes should be maintained through the period of construction and reinstated as soon as possible to avoid disruption to users.

C - 33 A COCP will be adopted to minimise temporary disturbance to residential properties, recreational users and existing land users. It will provide details of measures to protect environmental receptors.

Specific conditions to access of the Bolney site should be all access to the site should only be from the North. Access to the site via Kent Street must be avoided. Repairs to the road and verges must be fully maintained throughout the project to avoid recurrences of Rampion 1 instances.

C - 66 The Proposed Development will aim to minimise effects on the special qualities of the South Downs National Park and High Weald AONB through careful design consideration in terms of scale, size and location, and taking account of the relevant policy and guidance.

Within Shermanbury the curtilage of listed buildings and scenic views from frequently used footpaths, bridleways and views from the South Downs National Park must not be compromised.

sea defences/flood defence structures or in a flood plain) or from the Lead Local Flood Authority (LLFA) (for ordinary watercourse crossings).

C - 27 Following construction, construction compounds will be returned to the standard stipulated by the landowner and the relevant local authority.

C - 28 Particular care will be taken to ensure that the existing land drainage regime is not compromised as a result of construction. Land drainage systems will be maintained during construction and reinstated on completion.

Temporary cut - off drains will be installed parallel to the trench - line, before the start of construction, to intercept soil and groundwater before it reaches the trench. These field drains will discharge to local drainage ditches through silt traps, as appropriate, to minimise sediment release.

C - 61 Regard to Principles held in Rampion 1 design Plan and Landscape constraints to be developed for Rampion 2, for consideration of SLVIA impacts to the South Downs National Park/Sussex Heritage Coast

C - 63 Development of, and adherence to, a Code of Construction Practice (CoCP) to reduce direct and indirect disturbance and displacement effects to ornithological features

C - 67 The onshore cable route will avoid the brows of hills as far as is reasonably practical, and is likely to follow the established pattern of the landscape i.e. routed to closely follow the line of existing field boundaries as far as is practicable.

DCO works plans, description of development and requirements

C - 68 The final form of the substation will be finished to a high standard of design, using quality materials and integrated into the surrounding environment through the adoption of a robust, sustainable landscape planting strategy, taking account of the West Sussex Landscape Land Management Guidelines.

Within Shermanbury the curtilage of listed buildings and scenic views from frequently used footpaths, bridleways and views from the South Downs National Park must not be compromised. E.g. The Adur River Valley.

C - 103 Areas of temporary habitat loss will be reinstated wherever practicable following the completion of construction in each area. Wherever possible reinstatement will be back to the type of habitat crossed.

Wildlife corridors must be provided to maintain continuity of habitat. All hedge lines should be maintained in their current state.

C - 104 Enhancements to terrestrial ecology will be achieved as part of the Proposed Development through the delivery of new or improved habitats or measures to boost populations of certain species. Opportunities for these enhancements will be identified following further evolution of the Proposed Development design and through engagement with stakeholders. These enhancements may be delivered directly by RED within or close to the DCO boundary or via collaboration with independent organisations.

Our support of this measure is dependent upon more details when available.

C - 106 Speed limits will be imposed on all construction haul roads and access tracks to minimise the risk of road traffic

C - 71 RED will ensure that the land used for the development is suitable for the proposed use with respect to the potential for soil and groundwater contamination and, where necessary, risk-based remediation is undertaken in line with statutory guidance (Land Contamination: Risk Management). The precise design of any remediation strategy will be confirmed in the detailed design after DCO grant.

C - 73 Drainage design to manage and, if necessary, treat surface water run-off will be included in all elements of temporary and permanent infrastructure. Drainage design will follow the SuDS hierarchy with preference being given to local infiltration of surface water run-off from new areas of hardstanding, where possible. Where the development intersects overland flow pathways or areas of known surface water flooding appropriate measures will be embedded into the design.

C - 74 All subsurface infrastructure will be designed to facilitate subsurface flow pathways to avoid any localised increases in groundwater flooding.

C - 75 Construction and permanent development in flood plains will be avoided wherever possible. Where this is not possible (for example, the landfall location) environmental measures will be developed to ensure the works are NPPF compliant. Any works in fluvial floodplains will only be undertaken in line with the NPPF exception and sequential tests.

C - 76 In line with good practice pollution prevention plans will be drawn up to detail how ground and surface waters will be protected in construction and operation. These will include information on the storage of any fuels,

collisions with fauna such as badgers, otters, bats and barn owls.

The Wheatsheaf Road and Wineham Lane in Shermanbury are frequently used for recreational activities; arrangements should be made to ensure road safety and uninterrupted use for pedestrians, cyclists and horses.

oils and other chemicals and pollution incidence response planning. These will include measures for the protection of licenced and private abstractions. This could include a monitoring regime associated with critical or very proximate receptors.

C - 77 Dewatering of excavations will be undertaken in line with good practise. Effects of dewatering on potential receptors will be incorporated into the proposed approaches for each piece of infrastructure. Appropriate treatment will be installed before discharge to surface or groundwater, this will include the use of silt busters (or similar) before discharge to surface waters. Appropriate licences and permits will be applied for if required.

C - 79 Archaeological and paleo environmental mitigation will entail an agreed programme of archaeological recording and dissemination to mitigate any significant adverse effects during construction.

Shermanbury Parish Council oppose as written

C - 22 Core working hours for construction of the onshore components will be 0700 – 1900 Monday to Friday, and 0800 - 1300 on Saturdays, apart from specific circumstances to be set out and agreed in the COCP.

Core working hours should not be varied under any circumstances in areas within 1K of a residence.

The employment of an independent ombudsman available to residents with the power to intervene when infringements in agreed conditions occur is believed important by Shermanbury Parish Council to provide confidence to residents. The experience from Rampion 1 is that when activities breached conditions there was no effective remedy in real time.

C - 80 Any loss of built heritage assets or historic landscape elements will be mitigated through an appropriate level of survey and recording, where avoidance or sensitive adaptation is not feasible.

Any loss of built heritage assets or detracting of their historic setting and view is unacceptable under any circumstances.

C - 81 Loss or disturbance of historic landscape elements arising from temporary works will be mitigated, as far as possible, through sensitive design restoration and enhancements.

Complete restoration is essential without any mitigation.

C - 82 Any significant effects on the settings of heritage assets will usually be mitigated as far as possible through sensitive design, landscape planting or screening.

Any loss of built heritage assets or detracting of their historic setting and view is unacceptable under any circumstances.

04 August 2020

Richard Kent
Senior EIA Advisor
The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

By email only

Dear Mr. Kent

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 – Regulations 10 and 11

Proposed Rampion 2 Offshore Wind Farm – Scoping Consultation

Thank you for your letter, dated 6 July 2020, requesting the comments of the South Downs National Park Authority (SDNPA) on the applicant's report that accompanied their request for a Scoping Opinion from the Secretary of State.

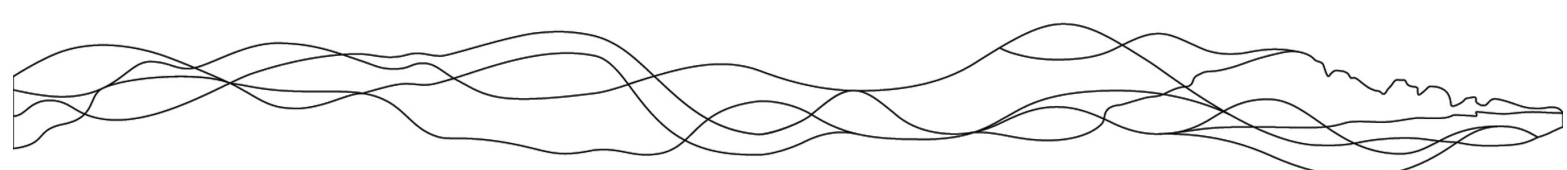
Major Development in a National Park

Part of the onshore cabling lies within the South Downs National Park and the proposal represents 'major development' within a National Park as defined within the National Planning Policy Framework (2019). The Overarching National Policy Statement for Energy (EN-1) at paragraph 5.9.10 states that development consent may be granted in National Parks in exceptional circumstances and where it is in the public interest. Therefore, consideration of this scoping opinion should reflect the highest status of protection the landscape of a National Park enjoys.

Overarching comment

SDNPA is disappointed to see the extent of the 'red line' which is proposed to the east and south of the existing Rampion 1 array. A portion of Zone 6 was specifically removed by the applicant (E.ON) from the Rampion 1 development area as mitigation for the significant adverse effects predicted for the South Downs National Park and the Sussex Heritage Coast. However, Zone 6 now extends further east than the exclusion zone for Rampion 1.

The in-combination and cumulative effects from the existing windfarm and the Rampion 2 proposal in these areas will be harmful due to the extent of the incursion in views and effects



over a wider area of the Heritage Coast and the National Park’s coastline due to the increased height of the proposed array, increased lateral spread of the joint arrays and extensive red line area.

SDNPA is disappointed to note that the scoping report for Rampion 2 does not address these issues in detail, nor does it set out how the proposal will have regard to both of the statutory purposes of the National Park.

Specific Comments

The SDNPA has broken its further comments down by topic area below and, for ease of reference, has broadly ordered its comments to follow the order of the applicant’s Environmental Impact Assessment Scoping Report dated July 2020 (their reference 42285).

Consideration of alternatives

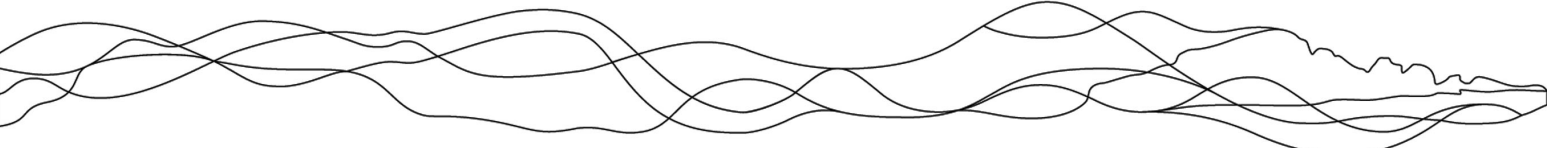
As is required by legislation section 2.4 sets out a brief introduction to how the EIA will consider the development options considered for Rampion 2 and the main reasons for selecting particular options.

As part of the onshore cabling lies within a National Park either the EIA or another document should address the policy tests in paragraph 5.9.10 of the Overarching National Policy Statement for Energy (EN-1), not least the requirement for an assessment of the cost of, and scope for, developing outside of the National Park.

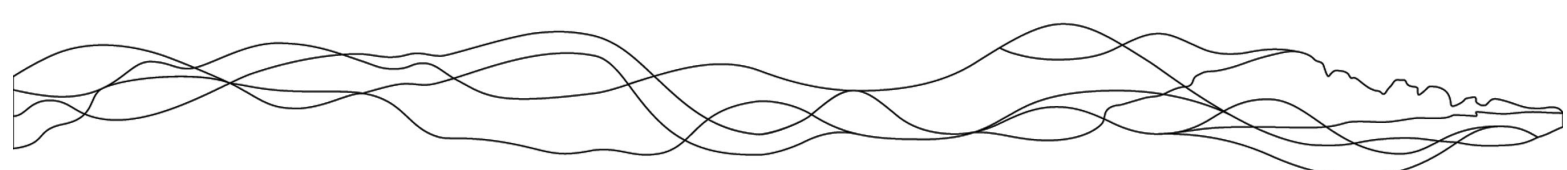
As noted above the consideration of alternatives should also include development options that do not intrude into the exclusion zone set aside as mitigation for the effects of Rampion 1.

Seascape and Landscape

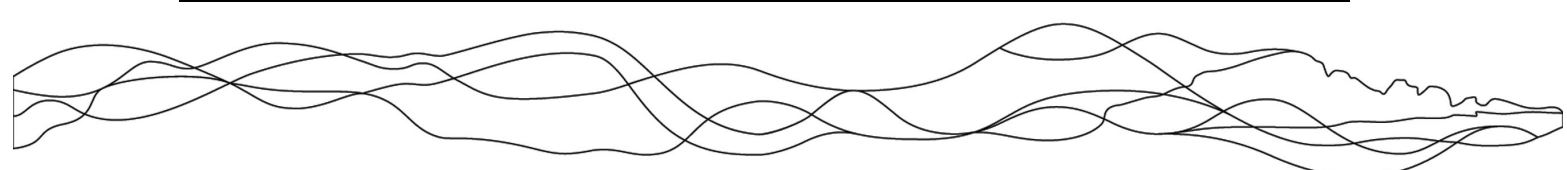
EIA Scoping Report Reference	SDNPA Comment
Overarching comment	SDNPA advises against relying solely on an assessment of impacts on the special qualities of the National Park (as set out in the draft SLVIA and LVIA) and that the assessments should also address how the proposals will meet both statutory purposes of the National Park.
General comments on the LVIA scope	<p>The LVIA process refers to a ZTV for the onshore element which has not been provided in the Scoping report. Therefore SDNPA wish to reserve judgement over the scoping out of views beyond 2km during construction as there may be locations within the SDNP which are further than 2km from the works but due to the combination of topography and proposed linear operations may be subject to significant effects during construction.</p> <p>The SDNPA requests that construction compounds are included in</p>



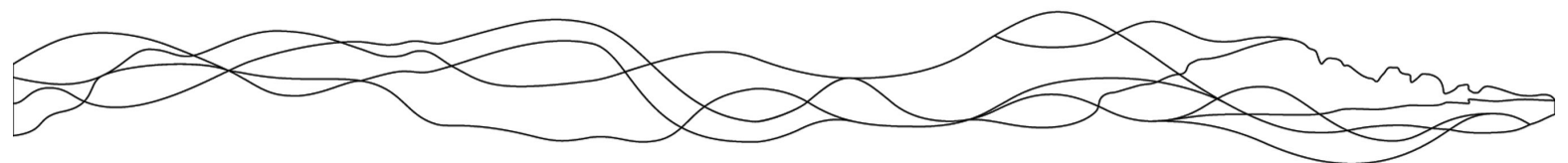
	the ZTV process.
Paragraph 5.13.61	<p>The reference to the ‘large scale landform massing of the South Downs’ is noted however the SDNPA would draw attention to the long history of the visual relationship between the sea and the land of the National Park, including:</p> <ul style="list-style-type: none"> • the line of iron age hillforts which occur across the length of the downland • the bronze age tumuli and barrows on many parts of the high downs • the ancient ridge top track of the South Downs Way, which crosses the landscape and provides repeating and changing views over the landscape and seascape for much of it’s length • The undeveloped backdrop to the coastline and the extensive view system from the high downs over the Bay of Sussex • The line of the downs and the cliffs at Seven Sisters which are an iconic English cultural landscape • The dramatic contrast between the flat coastal plain and the undeveloped slopes of the South Downs • The strong connection between the land and the sea from Seaford to Eastbourne where the SDNP meets the coastline
Paragraph 5.13.74	The South Downs Local Plan was adopted in July 2019, therefore the policies in it are not <i>draft</i> .
Table 5.13.3	The identification of viewpoints does not address the scale of visibility of the proposal from the SDNP. The effect of the proposed taller heights and larger geographic extent of the proposed array when compared to the existing array is acknowledged in paragraph 5.13.93, but this has not been translated into the identification of appropriate viewpoint locations. The omission of the SDNPA’s View Characterisation and Analysis (2015) document (also referred to here as ‘Viewshed Study’) from the reference material for this report is surprising, which, coupled with the failure to respond to the ZTV evidence means that there are many viewpoints which have been omitted from the outline viewpoint list. In response SDNPA has prepared a table and map of suggested viewpoints which form appendices 1 and 2 to this letter.
Table 5.13.5	The impacts on the 2 statutory purposes of the SDNP have not been set out in the scoping table.
Table 5.13.5, page 405	<p>This comment refers to the construction, operation, maintenance and decommissioning of the offshore elements of Rampion 2. The SDNPA does not support the scoping out of Special Qualities 5 and 6 from this scope – being;</p> <ul style="list-style-type: none"> • 5 - Great opportunities for recreational activities and learning experiences – this goes to the heart of purpose 2 of National Parks, and is relevant to the assessment of landscape and visual



	<p>impacts, and landscape value</p> <ul style="list-style-type: none"> • 6- Well conserved historical features and a rich cultural heritage – this special quality is embedded in the landscape and the cultural history of the SDNP, which is relevant to the assessment of Landscape character impacts and landscape value.
Paragraph 5.13.92	We do not agree that there are viewpoints considered in Rampion 1 where Rampion 2 would not have additional/cumulative effects.
Paragraph 6.2.81	<p>This paragraph requests stakeholders to suggest any initial viewpoints for the LVIA. Our preliminary suggestions, pending sight of the applicant's ZTV, are:</p> <ul style="list-style-type: none"> • Arundel castle (onshore also) (included in SDNPA Viewshed Study, 2015) • Arundel park PROW – higher zones • Monarchs way on River Arun (Viewshed Study) • Monarchs way on east valley side • Wepham Down PROW • Harrow Hill PROW • Chantry Hill (onshore also) (Viewshed Study) • Chanctonbury hill (onshore also) (Viewshed Study) • Sullington Hill PROW • Residential properties in Burpham and Wepham
Table 7.1, page 754	SDNPA asks that it should be set out how cumulative and in combination effects with Rampion 1 will be assessed. No detail of how this will be assessed is given.
Appendix C (SLVIA Methodology) and Appendix D (LVIA Methodology)	<p>The SLVIA and LVIA do not set out the process of how optioneering will inform the development of the scheme's design.</p> <p>It is noted that commitment C61 refers to the design principles in Rampion 1. The design principles for Rampion 1 may be useful but will not be completely transferrable or conclusive. In any case the Scoping Report does not set how these Rampion 1 design principles will be used to influence Rampion 2.</p> <p>It would be helpful if the SLVIA set out the likely design risks which are predictable at this stage such as, for example, the area in proximity to the Heritage Coast and the SDNP coastline and the visual relationship between the two arrays of differing sizes and scales.</p> <p>A statement setting out the methodology for refining the design parameters in terms of design options and potential array formations would be helpful. There are two options considered at the moment in the proposed Environmental Statement but it is unlikely that these two options would provide the level of detailed refinement needed within this highly sensitive landscape. Further design options presented via photomontage and wireframe visuals are requested for</p>



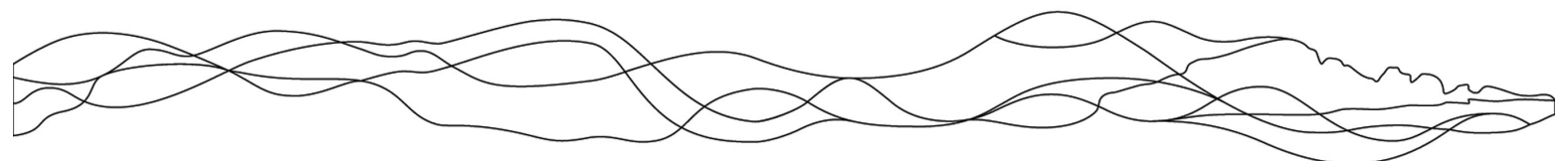
	various options which follow the suggested design parameters by Natural England (as made to the Crown Estate in 2018).
Appendix C (SLVIA Methodology) and Appendix D (LVIA Methodology)	<p><u>Integrated approach to Natural Beauty, Wildlife and Cultural Heritage</u></p> <p>The SDNPA supports the approach set out in the SLVIA and LVIA which uses the South Downs Integrated Landscape Character Assessment (SDILCA) as the chosen Landscape character assessment within the SDNP. However, the SDNPA also recommends that the <i>Integrated</i> approach to Natural Beauty, Wildlife and Cultural Heritage set out in the (SDILCA) would be more consistent with National Park purposes. The current proposed methodologies in the SLVIA and LVIA set out isolating these topics within separate chapters of the ES and disassociating landscape from wildlife and heritage features. Landscape is not experienced in this isolated way, often publicly accessible sites within the SDNPA are notable for all of these topics which contribute to the overall experience and natural beauty of the National Park. They contribute significantly to the experience of being in the SDNP as part of views, perceptions of time depth, wildness and remoteness and landscape character.</p> <p>This integrated approach would also be in accordance with <i>Guidelines for Landscape and Visual Impact Assessment</i> (2013). This would feed into the SLVIA and LVIA process through the identification of features and receptors – at the moment these are heavily filtered to omit wildlife and cultural heritage receptors (the list of landscape receptors omits Scheduled Ancient Monuments and SSSIs for example).</p> <p>SDNPA suggests that reference within the ZTV area is made to national designations as this would give a good background to the SDNP context and a better understanding of the landscape and it's features (receptors).</p>
Appendix C (SLVIA Methodology)	Photomontage images within the SLVIA that show the proposed array viewed from the SDNP from a wide range of angles and lighting conditions according to the time of morning/day/evening would be useful.
Page C19, table I.1	The row headed 'landscape scale;' the two descriptions for lower and higher sensitivity are in the wrong columns.
Page C28, table I.3	'Open views with no specific point of interest' could be very sensitive to the addition of an assertive focal point where this is inconsistent with an existing passive character.
Documents omitted from the Scoping Report	<p>The SDNPA considers that the Environmental Statement should also reference and have regard to the following documents:</p> <ul style="list-style-type: none"> English National Parks and the Broads Circular, DEFRA, 2010



	<ul style="list-style-type: none"> • South Downs National Park: Partnership Management Plan 2020-25 • South Downs National Park: View Characterisation and Analysis (2015) • Review of Seascape and Visual Buffers for Offshore Windfarms by Simon White Associates (March 2020)
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Trees, Woodland and Hedgerows

1. The SDNPA recommends that a tree survey in accordance with British Standard 5837: 2012 (Trees in relation to demolition, design and construction) should be undertaken to inform the LVIA and in particular to identify the effects on landscape character from construction processes over the 50m wide corridor.
2. British Standard 5837: 2012 should be applied at the earliest stages of the project to identify and plan for the retention, removal and protection of trees along the scoping corridor. This process should help inform the route selection in order to identify and retain the most important trees/woodlands/hedgerow which may be affected. Using British Standard 5837: 2012 should be an embedded environmental measure for trees and woodland.
3. The Arboricultural survey identified in table 6.6.6 is not cross referenced in the LVIA. This evidence should be used at the earliest stage to identify landscape impacts and help inform the corridor selection process.
4. Whilst the proposed undergrounding of cables is supported in preference to overhead lines, detailed information about tree, woodland and hedgerows to be affected across the proposed construction corridor are an essential element of the assessment of landscape impacts in the LVIA. The assessment should set out what the worst case scenario is regarding trees, hedgerow and woodland within the scoping area. Undergrounding on the scale proposed (with accompanying 50m construction corridor) will have potentially long term impacts if the route does not take account of tree and hedgerow losses. Whilst SDNPA agrees that these trees and hedgerows can be replaced, replacement planting takes a long time to match mature trees in many respects, not least in terms of their contribution to landscape character.
5. A full hedgerow survey should also be undertaken in order to identify the important hedgerows (likely to be a high percentage in the SDNP) and those which have a significant landscape contribution in order to accurately predict and assess likely impacts on landscape from construction.
6. The desire in the Embedded Environmental Measures C21 (table 6.2.3) to keep hedge removal to a *practical minimum* is not closely defined and clear width parameters should be provided in order to properly assess and predict likely landscape and visual impacts and in order to justify using this as an embedded environmental measure. The intention to retain vegetation *where possible* is equally vague.



Dark Night Skies

We welcome the confirmation given, in table 5.13.5, that the effects of the Rampion 2 lighting on the quality of dark night skies in the South Downs National Park is scoped in to the EIA. We also welcome the commitment given, in paragraph 6.2.84, that lighting requirements for the onshore elements of the proposed development will be reviewed and assessed and agreed with stakeholders between scoping and the PEIR.

Air Quality

The SDNPA agrees with both the items scoped in, and scoped out, on this matter and set out in table 6.3.5.

Noise and Vibration

Paragraph 6.5.34 acknowledges that baseline sound levels are expected to be low in the rural parts of the study area inland from the coast. This section should additionally reference the general tranquillity of the South Downs National Park, one of the National Park's special qualities. Table 6.5.1 should also reference, as a high sensitivity receptor, the National Park given the importance of maintaining and improving its tranquillity.

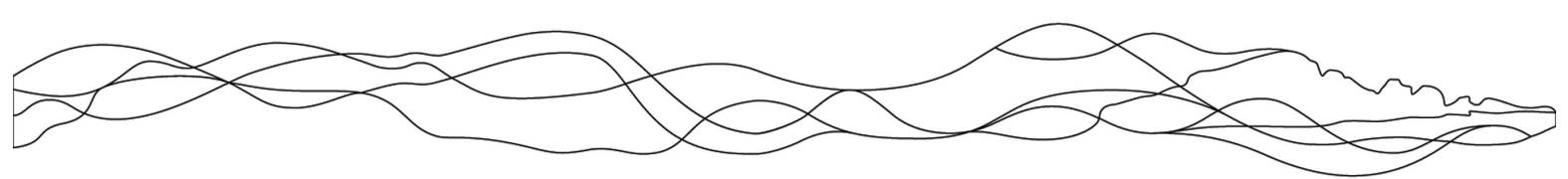
With reference to table 6.5.4 and commitment C-22 it is considered that the core working hours for construction, in order to protect residents' amenity, should be between 0800 and 1800 hours on Mondays to Fridays and 0800 and 1300 hours on Saturdays; as of course would generally be the case for building works in England. The proposed provision of a Code of Construction Practice, to be secured by DCO requirement, is welcomed.

Terrestrial Ecology and Nature Conservation

We consider that the scoping for biodiversity follows accepted best practice and in general the SDNPA supports the proposed content and issues that have been scoped in and also those that have been scoped out as there is no potential impact.

However, SDNPA wish to identify one area of concern. Breeding birds (other than those on Schedule 1 of the Wildlife and Countryside Act, 1981) have been scoped out on the basis that the on shore works are temporary in nature. However, this ignores the fact that all birds and their nests are protected by law (under the same act) and the proposed working corridor of up to 50 metres will require considerable destruction of habitat suitable for breeding birds. If this is scoped out of the EIA then there will be no working safeguards put in place to ensure that no bird nests are destroyed during habitat clearance. We would therefore request that this matter be scoped in.

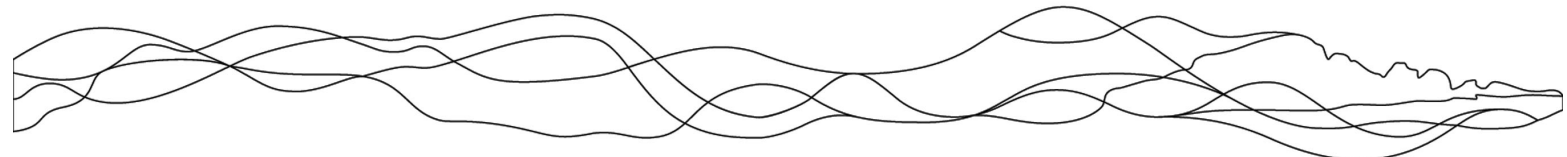
Whilst the Arun Valley SAC is 2.3km away from the area of search (and upstream) the designated feature, Ramshorn snail, is known to be present elsewhere in the Arun Valley, as recently identified by Natural England in regard to another issue.



Finally on this matter, the SDNPA also welcomes the reference made to the Draft Bat Protocol for the area that is being drawn up by the SDNPA and Natural England.

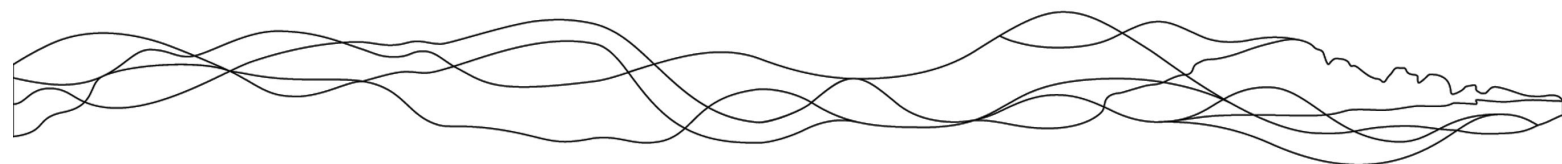
Transport

EIA Scoping Report Reference	SDNPA Comment
Paragraph 6.7.3	We consider that if any parts would require being moved via road to a suitably accessible port location then that route should be scoped in.
Paragraph 6.7.5	It is noted that figure 6.7.1 highlights the road network. Public transport such as rail should also be integrated into the transport assessment of this scheme.
Table 6.7.4	In relation to traffic data it is noted that the data from Rampion 1, obtained in 2012, would be used as a baseline. The most recent analysis of countrywide traffic data, the <i>Road Traffic Estimates in Great Britain: 2018 Report</i> shows that car traffic has grown by 6.3% overall in the period 2013 to 2018 and that growth in car traffic outstripped population growth. Therefore, Rampion 1 data should be supplemented with more recent data.
Paragraph 6.7.33	Injury collision hotspots on the Strategic Road Network (SRN) are identified but attention should also be given to the lower classifications of roads as they can have as many, if not more, injury collisions as roads on the SRN. Clarification is needed as to what particular features lead to an area being identified as a ‘hotspot’
Table 6.7.8	Some of the transport routes for this project are running through a National Park, and thus the activities which might be unlikely to have significant effect in other situations could well have greater impact here. Suitable environmental protection and mitigation measures will need to be provided. Further, where transport receptors reference users of PROW, equestrians, and not just walkers and cyclists, should be referenced.
Paragraph 6.7.56	<p>There would be benefit in liaising with Transport for the South East. We understand that they have carried out some COVID-19 recovery scenario modelling work and are preparing to undertake area studies along the southern orbital corridor that could be used to help establish baseline data.</p> <p>It is recommended that an additional point for discussion should be any impacts of the proposal on Open Access Land or Accessible Woodland. A process for communicating any temporary closures of Open Access land should be established and we have not found any reference in the scoping report to this, despite the presence of Open Access Land within the study corridor.</p>



Access and Public Rights of Way

EIA Scoping Report Reference	SDNPA Comment
Paragraphs 5.13.86 and 5.13.87	<p>This identifies principal visual receptors including people walking and cycling and intends to identify particular visual receptors for more detailed assessments. The SDNPA considers that the South Downs Way sites should be identified for more than simple assessments – especially where visitor numbers are highest in the east and/or where the proposed new additional turbines will be visible for the first time due to the wider extent of the array and the additional height.</p> <p>SDNPA asks that the EIA should set out an approach to assessing cumulative and successional impacts on the users of the South Downs Way along the route. Several viewpoints on the South Downs Way have been suggested in appendix I of this letter, not least as there are extensive sea views from many parts of this National Trail (acknowledged in paragraphs 5.13.66 and 5.13.67).</p>
Table 5.15.1	<p>We agree with the main receptors identified, however we consider that the South Downs Way should also be identified as a sensitive receptor in its own right given this is a National Trail with a high number of users. Open Access Land should also be identified as a recreational receptor.</p> <p>The scope of the Tourism Economy Assessment should include reference to the South Downs Way National Trail which in itself is a tourism asset, attracting both national and international visitors.</p>
Paragraph 5.15.14	<p>SDNPA welcomes proposals to follow emerging IPROW guidelines for assessing development impacts. The South Downs Way is a National Trail and as such is required to meet a range of quality standards, including a high quality user experience. Diversions required as a result of the construction phase should be as short as possible for a short a period of time as possible.</p> <p>While the developer seeks to keep diversions of PROW to a minimum our experience of Rampion I is that open trenches may remain for some considerable time and as such may be highly visible from long distances, impacting on views. Measure C-19 outlined in table 5.15.47 makes reference to trench sections being open only for a short timeframe. A definition of ‘short timeframe’ would be welcome.</p>
Paragraph 5.15.23	<p>We welcome acknowledgement of the need to consider in depth the range of events that take place annually on the South Downs Way. Approximately 35 – 40 large scale public events use the South Downs Way each year, including large charity events attracting over 2000 participants each.</p>



Paragraph 5.15.43	This conflates the South Downs Way with the separate Downs Link.
Table 5.15.16	Impact on the National Park should be included in relation to Tourism and Recreation impacts with specific reference to the South Downs Way and PROW.
Table 6.5.5	We request that PROW (including South Downs Way users) are added as potential receptors to noise and vibration impacts of construction traffic and drilling, not least as the onshore route crosses a National Park, designated for its open air recreational opportunities. We ask that these be addressed as part of the scoping report.

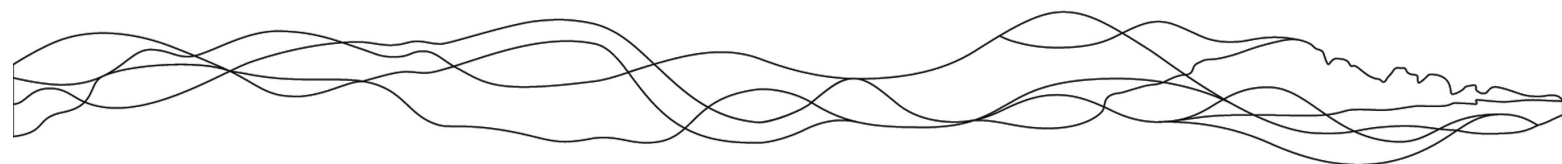
Archaeology

Our general comments on this matter are as follows:

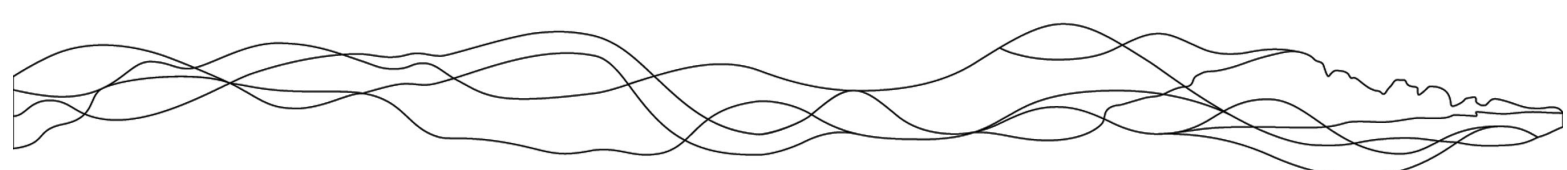
1. Existing archaeological data only accounts for what we know so far – there is huge archaeological potential within the scoping area and the archaeological understanding of the impact of the project must be furthered, not least to help determine an appropriate mitigation scheme for archaeological preservation (whether in situ or by record).
2. There should be a commitment to public engagement and dissemination of archaeological findings, to include improved interpretation and public access to information.

Detailed comments are in the table below.

EIA Scoping Report Reference	SDNPA Comment
MARINE ARCHAEOLOGY	
Paragraph 2.3.15	If the off shore installation includes “seabed levelling” and “removing surface and subsurface debris” geophysical surveys should involve retrieval of seabed sediment samples to support geoarchaeological and environmental analysis.
Table 5.14.7	In relation to this table there should be: <ul style="list-style-type: none"> • Clear procedures for reporting of findings to the West Sussex Historic Environment Record. • Desk based deposit modelling by a geoarchaeologist familiar with the Pleistocene geological sequence of the West Sussex coastal plain with the model to be updated from ground investigation information when available. • Modelling to interface with deposit modelling for the landfall area. • Reference paragraph 5.14.49 the Protocol for Archaeological Discoveries should include a mutually agreed and appropriate



	method of ensuring public engagement throughout the project.
ONSHORE ARCHAEOLOGY	
Table 5.13.1	The English Heritage list here is not definitive for heritage destinations within and outside the National Park. Suggest cross referencing with Arts Council England data for museum and gallery attractions to ensure independent heritage attractions (i.e. those not under the ownership of English Heritage or National Trust) are considered.
Paragraphs 6.9.2 and 6.9.8	The interface and common references between archaeological and landscape, visual and noise assessments is welcomed.
Paragraph 6.9.8	<p>New hi-resolution LiDAR surveys, to help identify earthworks, may be required for any areas of woodland which would be directly affected by the cabling corridor and where there is no existing LiDAR coverage. Impacts on historic woodland should consider the historic environment data in addition to biodiversity, soil and tree data in order to create a holistic picture of these landscape spaces.</p> <p>The use of deposit modelling as set out in the 5th bullet point is welcomed. This should be carried out by a geoarchaeologist familiar with the Pleistocene geological sequence of the West Sussex coastal plain. Modelling should interface with marine archaeology deposit modelling.</p>
Table 6.9.4	This should be more explicit by stating that determining the appropriate extended study area will be, additionally, guided by the assessment, analysis and interpretation of Historic Environment Record data.
Table 6.9.5	<p>Dissemination should include a mutually agreed and appropriate method of ensuring public engagement throughout and beyond the project. Built Heritage survey and investigation should also be disseminated to the public.</p> <p>Measures must also include provision for curation and disposition of archaeological site archives. Project budgeting should include recognition of deposition charges for the recognised archaeological archive repositories, to ensure public access of the site archives post excavation. The lack of storage space in recognised archaeological archive repositories in Sussex means that costs should also be obtained for alternative repositories (e.g. DeepStore).</p>
Table 6.9.6	The approved archaeological/ historic environment Written Scheme of Investigation method statement should outline measures for public dissemination and access.
Table 6.9.7	The scoping out here is considered to be reasonable.



Paragraph 6.9.14	This paragraph notes "...this would arise from direct disturbance or removal of archaeological material resulting in the loss of archaeological interest". This is not loss of archaeological interest, but destruction of a site (which occurs even with preservation by record). The result would therefore be total loss of a site.
------------------	--

Close

We trust that the information above will be of assistance in forming your scoping opinion. However, if you have any queries please do not hesitate to contact my colleague Mike Hughes at mike.hughes@southdowns.gov.uk, and at 01730 819325.

Yours sincerely

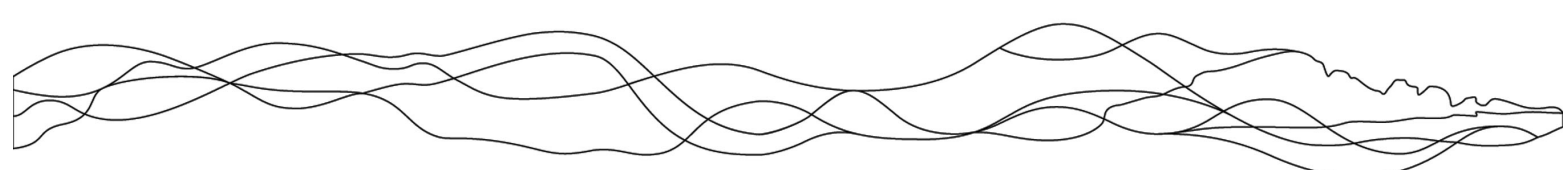


Tim Slaney
Director of Planning

South Downs Centre, North Street,
Midhurst, West Sussex, GU29 9DH

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E: info@southdowns.gov.uk
www.southdowns.gov.uk

Chief Executive: Trevor Beattie

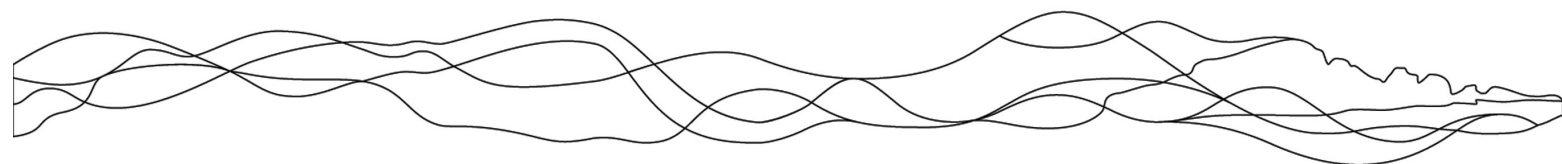


APPENDIX I – Suggested additional viewpoints

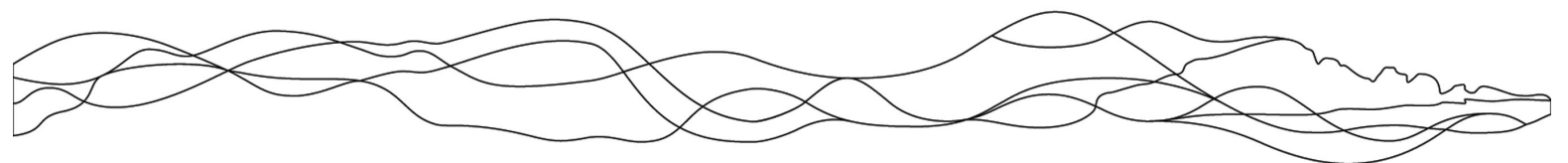
The following viewpoint list has been identified largely from the SDNPA's View Characterisation and Analysis Report (2015) together with further viewpoints based on local knowledge. Please refer to the map at appendix 2 which displays these viewpoint locations.

The table below identifies any international or national designations which are present at the suggested viewpoint.

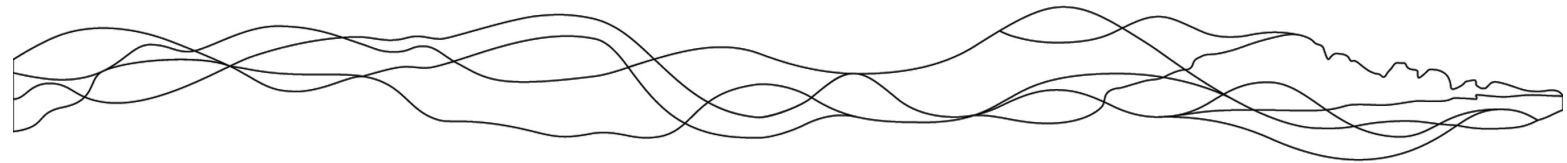
Name	SDNPA Viewshed (2015) number	Included in RED list /number	Distance from Rampion 2	International/National level Designations
Butser Hill	(8)	no	45km	South Downs Way National Trail South Downs National Park Butser Hill SAC Butser Hill SSSI Butser Hill NNR Open Access Land Hilltop enclosed by Iron Age cross dykes, Bronze age barrows Scheduled Ancient Monument
The Trundle	(11)	no	29km	Trundle Iron Age Hillfort Scheduled Ancient Monument Monarchs Way Long distance trail
Ditchling Beacon	(22)	no	24km	Hillfort, beacon and dewpond, Scheduled Ancient Monument Ditchling Beacon Wildlife Trust Reserve South Downs Way National Trail, South Downs National Park Open Access Land
Chanctonbury Ring (onshore and offshore)	(23)	no	24km	South Downs Way National Trail South Downs National Park Chanctonbury Hill SSSI Chanctonbury Ring Hillfort Scheduled Ancient Monument
Amberley Mount	(32)	no	26km	South Downs Way National Trail South Downs National Park Open Access Land Amberley Mount to Sullington Hill SSSI
Chantry Hill Offshore and onshore	(33)	no	25km	South Downs Way National Trail South Downs National Park Open Access Land Amberley Mount to Sullington Hill SSSI

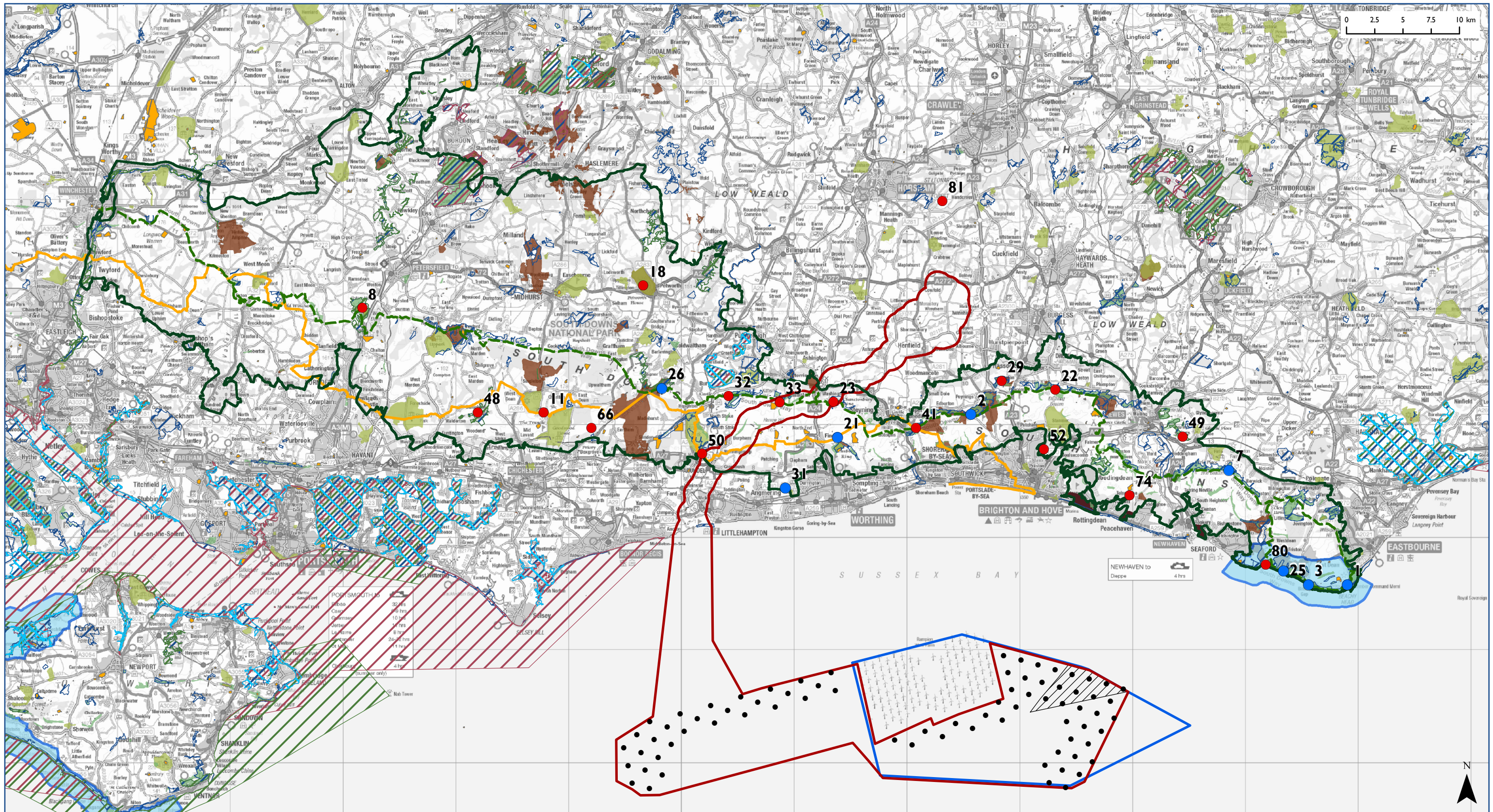


Beeding Hill	(41)	no	21km	South Downs Way National Trail South Downs National Park Beeding Hill to Newtimber Hill SSSI
Kingley Vale	(48)	no	31km	South Downs National Park Open Access Land Kingley Vale National Nature Reserve Two Bell Barrows & Cross Dyke & many more Scheduled Ancient Monuments Kingley Vale SAC Kingley Vale SSSI
Mount Caburn	(49)	no	22km	South Downs National Park Open Access Land Lewes Downs SAC Lewes Downs SSSI Iron Age Hillfort Scheduled Ancient Monument
Arundel Castle & parkscape	(50)	no	23km	South Downs National Park Grade II* Registered Parkscape Grade I Listed building Arundel Castle Scheduled Ancient Monument
Halnaker Windmill	(66)	no	26km	South Downs National Park Causeway enclosure, WWII Searchlights Scheduled Ancient Monument Grade II Listed building, Halnaker Windmill
Telscomb Tye –	(74)	no	16km	South Downs National Park Relatively undeveloped section of coastline connected to the Tye and high downs
Cuckmere Haven beach	Not in Viewshed Study	no	17km	South Downs Way National Trail South Downs National Park Open Access Land Seaford to Beachy Head SSSI Sussex Heritage Coast
Hollinbury Hillfort	52	no	18km	Iron Age Hillfort Scheduled Ancient Monument South Downs National Park
Wolstonbury Hill	29	no	23km	South Downs National Park Open Access Land
Petworth Park	18	no	37km	Grade I Registered parkscape South Downs National Park Petworth National Trust



APPENDIX 2 – Map: SDNPA suggested additional viewpoint locations

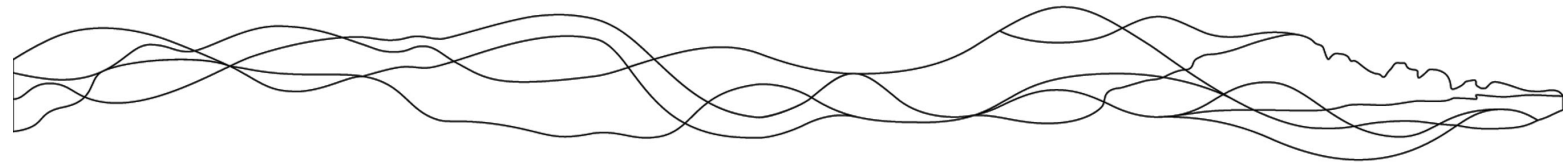




<p>Viewpoint</p> <ul style="list-style-type: none"> ● On RED list ● Not on RED list 		<ul style="list-style-type: none"> ● Turbine (max. devt.) Rampion Scoping Boundary (incl. offshore) Rampion Zone 6 Exclusion zone 		<p>SDNPA boundary</p> <ul style="list-style-type: none"> SDNPA boundary South Downs Way National Trail Monarch's Way Open Country 		<p>International/National level Designations</p> <ul style="list-style-type: none"> Special Protection Areas Special Area of Conservation Ramsar site Site of Special Scientific Interest 		<ul style="list-style-type: none"> Heritage Coast Scheduled Monument Parks And Gardens National Trust land Zone of Undeveloped Coast 	
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APPENDIX 3 – Map: SDNPA Cumulative Viewshed Map

(Source: SDNP View Characterisation and Analysis Report, 2015)



South Downs National Park Viewshed Characterisation & Analysis

Figure 2.2

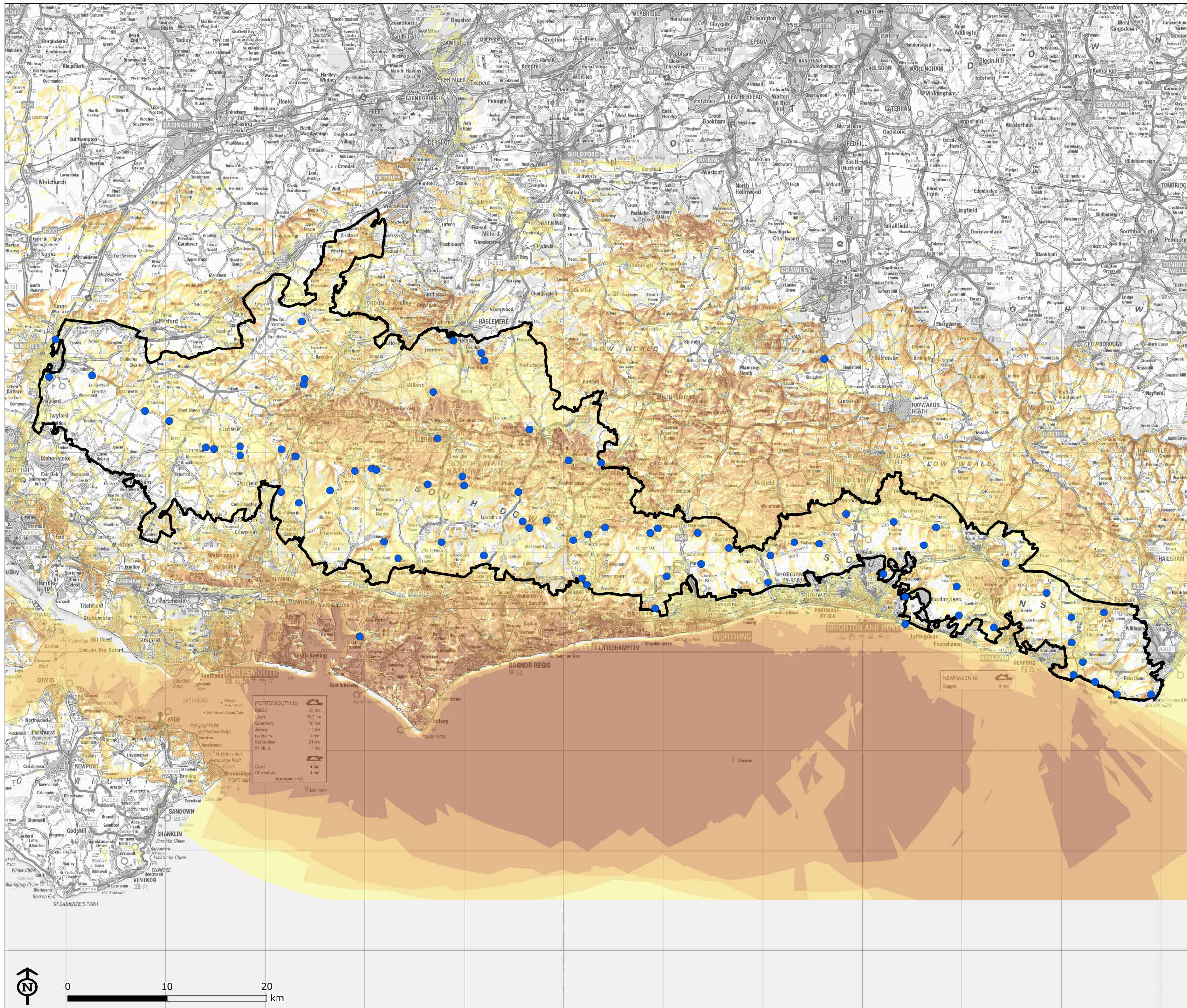
Cumulative Viewshed Map

South Downs National Park

Representative viewpoint

Number of viewpoints location is visible from

- 1
- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 20
- 21+



Map Scale @ A3: 1:375,000



Kent, Richard

From: Maureen Prescott <maureen.prescott@surreycc.gov.uk>
Sent: 08 July 2020 14:10
To: Rampion2
Cc: Stephen Jenkins; Planning Consultations/EAI/SCC
Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping notification and consultation (Reference number: 1604959)

Dear Sir/Madam,

The Interim Development Planning Manager has asked me to respond to your letter dated 06 July.

I can confirm that Surrey County Council has no comments on the EIA Scoping consultation.

Thank you for consulting us.

Maureen Prescott
obo Stephen Jenkins
Interim Development Planning Manager
Surrey County Council

Email: planning.consultations@surreycc.gov.uk

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Kent, Richard

From: Stephen Vanstone <Stephen.Vanstone@trinityhouse.co.uk>
Sent: 04 August 2020 06:53
To: Rampion2
Subject: FW: EN010117 Rampion 2 Offshore Windfarm scoping notification and consultation.
Attachments: Letter to stat cons_Scoping & Reg 11 Notification.doc_Rampion2.pdf

Good morning,

With reference to the attached, I can advise that Trinity House would expect the following to form part of the Environmental Statement:

Navigation Risk Assessment

- Comprehensive vessel traffic analysis in accordance with MGN 543.
- The possible cumulative and in-combination effects on shipping routes and patterns should be adequately assessed.
- Proposed layouts should conform to MGN 543 and significant consideration should be given to the layout of the current Rampion Offshore Wind Farm in this regard. The Rampion 2 project layout should align with the current operational site.
- If any structures, such as substation(s), lie outwith the actual wind farm turbine array layout, then additional risk assessment should be undertaken.

Risk Mitigation Measures

- We consider that this development will need to be marked with marine aids to navigation by the developer/operator in accordance with the general principles outlined in IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities) Recommendation O-139 on the Marking of Man-Made Offshore Structures as a risk mitigation measure. In addition to the marking of the structures themselves, it should be borne in mind that additional aids to navigation such as buoys may be necessary to mitigate the risk posed to the mariner, particularly during the construction phase. All marine navigational marking, which will be required to be provided and thereafter maintained by the developer, will need to be addressed and agreed with Trinity House. This will include the necessity for the aids to navigation to meet the internationally recognised standards of availability and the reporting thereof.
- A decommissioning plan, which includes a scenario where on decommissioning and on completion of removal operations an obstruction is left on site (attributable to the wind farm) which is considered to be a danger to navigation and which it has not proved possible to remove, should be considered. Such an obstruction may require to be marked until such time as it is either removed or no longer considered a danger to navigation, the continuing cost of which would need to be met by the developer/operator.
- The possible requirement for navigational marking of the export cables and the vessels laying them. If it is necessary for the cables to be protected by rock armour, concrete mattresses or similar protection which lies clear of the surrounding seabed, the impact on navigation and the requirement for appropriate risk mitigation measures needs to be assessed.

Kind regards,

Stephen Vanstone

Navigation Services Officer | Navigation Directorate | Trinity House

stephen.vanstone@trinityhouse.co.uk | 0207 4816921

www.trinityhouse.co.uk



TRINITY HOUSE

From: Rampion2 <Rampion2@planninginspectorate.gov.uk>
Sent: 06 July 2020 14:21
To: Thomas Arculus <Thomas.Arculus@trinityhouse.co.uk>
Subject: EN010117 Rampion 2 Offshore Windfarm scoping notification and consultation.

Dear Mr Arculus

Please see attached correspondence on the proposed Rampion 2 Offshore Windfarm.

Please note the deadline for consultation responses is 4 August 2020, and is a statutory requirement that cannot be extended.

Regards

Karen Wilkinson
EIA and Land Rights Advisor
Major Casework Directorate
Direct Line: 0303 444 5072
Helpline: 0303 444 5000
Email: karen.wilkinson@planninginspectorate.gov.uk

Please note my working days are Monday, Thursday and Friday.

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

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Kent, Richard

From: clerk@twineham-pc.gov.uk
Sent: 27 July 2020 13:23
To: Rampion2
Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping Notification and Consultation

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon,

Twineham Parish Council is grateful for the opportunity to respond to the Rampion 2 Scoping Report, recently submitted to the Planning Inspectorate.

Twineham Parish Council is very disappointed that the substation at Bolney, located in the Parish of Twineham, has been selected for the connection to the National Grid for the Rampion 2 project. At present there are already three substations in the Parish of Twineham, with planning permission for a solar array (covering both Twineham Parish and the adjoining Bolney Parish) to the east of the current Rampion substation, which will extend to some 40 acres. There are also some overhead power lines. Another substation in the Parish will have a very detrimental, cumulative effect on this very rural area.

The substation for Rampion 1 was commenced in September 2014, and was due to be completed in December 2016. The ancilliary works are not now due to be completed until December 2020, i.e., four years late. Local residents are still enduring noise from construction vehicles.

Local residents in this very rural area have been hugely inconvenienced by the construction of the Rampion 1 substation and cable route. For example:

- Breaches of Requirements with regard to traffic, hours of work, including weekends
- Use of generators
- A siltbuster running continuously
- Pile driving next to a residential property on a Sunday lunchtime without permission
- Lights being left on, despite this being an Area of Dark Skies
- Noise from the construction site, including reversing beepers
- Local residents enduring extended hours of work, including from 6.00 am - 9.20 pm one summer
- Discharging of water containing diesel
- Flooding
- A permanent "hum" from the substation site

Twineham Parish Council is very concerned regarding the impact another substation would have on this very rural area. Local residents have put up with a lot.

The Parish Council requests that the Rampion 2 Environment Statement must take into consideration the following matters:

- Landscape and visual impact
- Use of minor roads for access
- Noise from long working hours
- Effect on Listed Buildings and Heritage Assets
- Effect on ancient hedgerows and ancient woodland

- Flooding
- No overhead power lines or pylons

If you require any further information please do not hesitate to contact me.

Kind regards
Dawn

Dawn Langston

Clerk to Twineham Parish Council

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Kent, Richard

From: Planning Policy <planningpolicy@waverley.gov.uk>
Sent: 04 August 2020 16:31
To: Rampion2
Subject: EN010117 Rampion 2 Offshore Windfarm EIA Scoping notification and consultation

Dear Sir/Madam,

Thank you for consulting Waverley Borough Council on the above consultation. I can confirm that we do not have any comments.

Kind regards,

Alice Knowles
Planning Officer (Policy)
Waverley Borough Council
Tel: 01483 523527

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Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 – Regulation 10 and 11: Application by Rampion Extension Development Limited (hereafter referred to as RED) for an Order granting Development Consent for Rampion 2 Offshore Wind Farm – Scoping Request stage

This document provides comments by West Sussex County Council (hereafter referred to as WSCC) on the Rampion 2 Offshore Wind Farm Environmental Impact Assessment Scoping Report (July 2020, document reference 42285), requested by the Planning Inspectorate on the 6th July 2020 (Reference EN010117-000006).

This response covers comments from WSCC only and does not include comments on behalf of the District or Borough councils within West Sussex. It also does not provide comments in relation to the South Downs National Park (except those in relation to Highways or Public Rights of Way), which will be provided by the South Downs National Park Authority (SDNPA). It should also be noted that WSCC Public Health Team have provided a response with regards to any potential risk to the health of the local population via Public Health England (PHE) and is not included within this document. The Scoping Boundary as shown in Figure 1.1, is fully within WSCC boundary, and therefore comments will relate to onshore receptors to Mean High Water Springs (MHWS), and offshore elements (below MHWS) where relevant to WSCC.

WSCC appreciates the informal consultation held to date with RED with regards the Proposed Development. More specific comments in terms of the site selection process, consultation and the contents of the Scoping Report are included in the relevant sections of the table below. Appendix 1 contains the full text for all internal WSCC consultees requested to comment.

The table below provides comment for each Scoping Report chapter relevant to WSCC, with specific paragraph/table/figure references where applicable.

Reference	WSSC Comment
Introduction	
General	It would have been useful if the Scoping Report had an Executive Summary before the 52 pages of acronyms/glossary/figure and table lists to allow an upfront introduction to the Proposed Development.
Figure 1.1	It would be useful if Figure 1.1 showing the Scoping Boundary, also included an annotation showing the specific search areas for the project's electrical components, including the landfall, onshore cable route and onshore substation. These areas are discussed in paragraph 2.3.3 and would have been aided by a visual representation of them to help the understanding of the geographical areas discussed.
1.2.5	WSSC welcomes, pursuant to Regulation 14 (4) of the 2017 Environmental Impact Assessment (EIA) Regulations, the resultant Environmental Statement (ES) being prepared by competent experts. WSSC expects to see that the PEIR/ES provides a Statement of Competence to this effect.
The Proposed Development	
2.3.3	As discussed above, the description of how the search areas for the onshore electrical components would have been made much more transparent if the area were shown clearly on a figure, rather than just the Scoping Boundary. A description of how the Scoping Boundary was identified, specifically in relation to identified environmental constraints would have been useful.
2.3.12	It is understood that Rampion 2 capacity will be 1.2GW as opposed to 400MW for Rampion 1, and that a commitment has been made by RED that the number of turbines will not exceed that of Rampion 1. WSSC understands the process for design refinement and at this stage RED need to undertake further surveys and assessment to best site the WTGs and associated offshore substations. WSSC is concerned however over the large area of the offshore scoping boundary, and the potential impacts to a number of receptors within West Sussex and beyond if larger WTGs and additional substations are to be potentially placed over such a large expanse. WSSC expects to see a full Seascape and Landscape Visual Impact (SLVIA) assessment of how views in the defined study area will be affected. Further comment on this is provided within the technical chapter sections of this table.
2.3.33	WSSC requires clarity on whether access will be required to the Transition joint bays post completion, and if so the nature of this access.
2.3.29	WSSC would wish to understand and further discuss the extent of the likely effects on the beach area at Climping. Based upon the experience of Rampion 1, cable works at the HDD exit offshore, required works with plant, on a number of occasions at low tide, which required access to and from the beach and installation of temporary associated compounds on the beach.
2.3.35	Will the required cabling and upgrades to the National Grid Bolney substation be included within the DCO application and therefore assessed as part of the EIA? If not part of the main EIA, will this be considered as part of the Cumulative Impact Assessment (CIA)? Detail on this element is vague.
Figure 2.1	This figure does not describe how the newly created Rampion 2 onshore substation will connect to the National Grid Bolney substation, will this be underground cabling or overhead lines? This is particularly important if a remote substation is proposed.
2.3.37	WSSC is concerned with the statement ' <i>The onshore grid connection for Rampion 2 will be made via a buried cable along the entire length of the route wherever possible</i> '. Can there be a commitment from RED for underground cabling

	throughout? This statement is inconsistent throughout the Scoping report, as some chapters state that underground cabling is for the entire route.
2.3.38 and Table 2.3	WSCC is pleased to see the use of HDD techniques as part of the cable installation methodology. WSCC would want to see RED committing to a list of those sensitive crossings (including those identified during consultation with stakeholders and those flagged during the assessment process) in a clear crossing schedule presented as part of the PEIR and ES reporting. This should include consideration of both large scale HDD (with drilling rigs), and smaller scale auger boring, to avoid sensitive features where necessary.
2.3.39	Will RED commit to the link boxes being underground rather than above ground structures to avoid any potential visual impacts? If they are to be above ground, WSCC will expect to see the dimensions and frequency of these assessed as part of the EIA.
2.3.41	WSCC expects to see at the PEIR stage a full presentation of the location, dimensions and nature of all temporary construction areas, including those areas wider than the 50m working width (including the size of the required HDD compounds, exit and entry pits), and a full justification for the sizes and locations needed. This should include consideration of both key construction compounds (which can be expected over a longer period), satellite compounds, and any smaller lay-down areas /welfare facilities along the working width.
2.3.45	If the construction of the offshore wind farm is likely to be phased, and ducts installed and then cables pulled through at a later stage, this potential scenario will need to be assessed within the EIA. WSCC would want to see the construction phase as short as possible to reduce any potential impacts to receptors within West Sussex.
2.3.46	Can RED confirm the 4.5 ha 'site footprint' figure quoted for the onshore substation? Does this include all of those elements stated in 2.3.47 as well as the operational footprint requirements? Does this include an allowance for potential attenuation ponds also? There is no indicative drawing for the substation building, and no design parameters for approximate building height within this chapter which WSCC would expect to see, to understand the potential visual impacts of this structure at this stage of the development. WSCC and other stakeholder groups would find a comparison with the dimensions and visual appearance of the Rampion 1 onshore substation a useful aid during consultation.
General	WSCC would want to further understand how the Rampion 2 onshore substation will be connected to the National Grid Bolney substation and the level of work required to upgrade this.
2.3.47	Can RED confirm if piling will be required? WSCC would expect to see this assessed as a worst case within the EIA if it cannot be ruled out at this stage due to lack of ground investigation information.
Figure 2.7	WSCC would like to understand further the likely construction durations for each element of the Proposed Development, currently the onshore section of the programme is not clear for landfall, cable route, onshore substation and national grid connection works. The construction programme should be reviewed based on experience of Rampion 1, noting the increase in length of the cable route, additional number of trenches, and increase in substation size. Any assessment must consider reasonable contingency to ensure assessment of potential impact is robust (Rochdale Envelope).

2.3.56	If decommissioning will involve the reverse sequence of construction activities, can RED indicate how long this may take? It is understood that the detail and scope of the decommissioning works will be determined by the relevant legislation and guidance at the time of decommissioning.
Consideration of alternatives	
General	WSCC wishes to reiterate the importance of the site selection process and how the involvement of WSCC in providing local knowledge, feedback on proposed routing options and input to potential opportunities is critical. As well as regular involvement in the Evidence Plan Process (EPP), WSCC wishes to see a clear presentation of how RED have reached a chosen design to take forward to EIA and DCO application, and how stakeholder feedback and environmental constraints and opportunities have fed into this process. WSCC wish to see the footprint of the project minimised as much as possible to avoid environmental impacts to sensitive receptors within West Sussex. This is particularly important for the above ground infrastructure whether onshore or offshore.
2.4.5 and 2.4.9	WSCC notes that the offshore Scoping Boundary to the north maintains its minimum 13km distance from shore and is not proposed to be any closer than the existing Rampion 1. However, as noted in 2.3.12, WSCC is concerned however over the large area of the offshore scoping boundary, and the potential impacts to a number of receptors within West Sussex and beyond if larger WTGs and further offshore substations are to be potentially placed over such a large expanse.
Table 2.4	<p>WSCC notes the list of environmental constraints data sets used to feed into the site selection process at this stage, however, WSCC wishes to see the following data sets within the County included:</p> <ul style="list-style-type: none"> • PRowS (not just National Trails); • Potentially contaminated land; • Flooding from surface and groundwater; • All known watercourses; • Source Protection Zones; • Safeguarded minerals and waste sites/infrastructure (those already built) • Major Roads (rather than motorways mentioned); and • ‘Quarries’ expanded to safeguarded mineral resources and quarries. <p>All data collated for the purposes of baseline condition identification as part of the EIA should be fed into the site selection process.</p>
2.4.11	<p>WSCC would like to have seen a key list of site selection principles included up front in the assessment of alternatives section of the Scoping Report, which RED have used as guiding principles for route planning, such as:</p> <ul style="list-style-type: none"> • Preference for shortest onshore cable to minimise the overall footprints and the number of receptors that will be affected; • Avoid key sensitive features, where possible; and • Avoid populated areas, where possible. <p>Can this please be included in the relevant chapters of the PEIR.</p>
2.4.20	<p>Section 2.4.20 states that: <i>‘This substation, landfall and connecting cable route combination was selected largely due to Climping being in closest proximity to the preferred connection point (relative to other options considered) but also for the following key reasons:</i></p> <ul style="list-style-type: none"> • <i>The lack of statutory designations at the coast and immediately inland in association with the Climping landfall;</i>

	<ul style="list-style-type: none"> • <i>There are no statutory ecological designations along the indicative cable route'</i> <p>The above statement is very misleading. As shown in Table 6.6.7, there are statutory ecological designations both at the coast (Climping Beach SSSI and West Beach LNR), and also within the Scoping Boundary along the indicative cable route (including Arundel Park SSSI, Chanctonbury Hill SSSI and Amberley to Sullington Hill SSSI). Although 2.4.20 does present a list of reasons why this site was chosen, WSCC will expect to see more detailed explanation of the assessment around the chosen landfall at Climping, and the justification of discounting any other combination of landfall and onshore cable route options which could connect to the chosen connection point at Bolney. WSCC appreciates the Scoping Report considers only initial appraisal outcomes (2.4.17-2.4.20), but the level of detail regarding decisions made and the associated constraints mapping needs to be presented in a much more transparent and robust manner in the PEIR.</p> <p>WSCC requests that through the site selection process, all known environmental constraints identified be avoided where possible. Careful consideration should be given to the placement of the electrical infrastructure within the substation search area. All identified constraints and sensitives should be assessed to minimise the landscape and visual effects associated with introducing new electricity infrastructure to the local environment.</p>
2.4.26	<p>Section 2.4.26 states that <i>'The PEIR (Preliminary Environmental Information Report) will present the preliminary findings of the assessment to allow an informed view to be developed of the Proposed Development, the assessment approach that has been undertaken, the likely significant effects and environmental measures proposed.'</i></p> <p>The PEIR will therefore play a key role in informing the later stages of the assessment process. The ES should demonstrate that all opportunities have been taken to provide ecological enhancement.</p>
Policy and Legislative context	
3.1	It would be useful if in the introductory section for this chapter, RED had outlined the contribution Rampion 2 could make to meeting renewables targets, and those climate change and renewable energy drivers listed in Table 3.1.
3.5.4	WSCC appreciates this is not an exhaustive list of up to date guidance documents. However, reference to the substation siting principles within the Horlock rules by National Grid would be preferable. Any additional guidance documents WSCC suggest being included are mentioned within each topic specific technical chapter.
The EIA Process	
4.2.1	WSCC understands that measures required in response to COVID-19 have consequences for an Applicant's proposed approach and ability to obtain relevant environmental information, including consultation feedback for the purposes of their assessment. As per PINS Advice Note Seven (Version 7, June 2020), WSCC will look for RED to provide suitably flexible approaches, in keeping with government COVID-19 guidelines, to aid the robust collation of information for the purposes of PEIR and ES production.
4.3	WSCC welcomes the commitment by RED for consultation with stakeholders on the EIA process as it develops, alongside the relevant input to the site section process. WSCC expect to be included and consulted upon all relevant matters within their jurisdiction as part of the EPP.
4.3.6	WSCC would like to understand how local communities within the Scoping Boundary

	<p>will be consulted upon to help provide local input into the site selection process, especially in areas which are affected by above ground infrastructure.</p> <p>Notwithstanding the consultation required through the Statement of Community Consultation (SoCC) (which WSCC will review once available) once approved, WSCC would encourage early engagement with affected stakeholders and consultation with local communities in West Sussex to gain local knowledge and understanding of the local area.</p>
General	<p>WSCC wish further clarity on how the impacts will be presented. Will the impact assessment present pre- additional mitigation impacts, followed by the residual impacts once any additional mitigation is applied? This is not clear within the EIA methodology.</p>
Approach to EIA	
4.4.7-4.4.9	<p>WSCC welcomes the approach to delivering proportionate EIA, considering the Institute of Environmental Management and Assessment (IEMA)'s guidance document Delivering Proportionate EIA: A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice (IEMA, 2017), as long as there is certainty and robustness in the evidence base used to focus the scope of the assessments upon the material issues.</p>
General	<p>The EIA should focus on mitigation and compensation to be provided, and this needs to both be clearly presented in the PEIR/ES and measurable, particularly if it is relied on for the purposes of presenting the residual impacts within the assessment.</p>
4.4.22	<p>With respect to the areas which RED have stated do not require their own chapter, WSCC have the following comments:</p> <ul style="list-style-type: none"> • Major accidents and disasters – WSCC agree this does not need its own chapter and should be assessed in relevant topic chapters. It should assess the likely risks to the project in relation to potential areas of vulnerability; • Human Health – WSCC agree this does not need its own chapter, as long as a clear and robust assessment for all relevant receptors is included in the relevant topic technical chapter. This should build upon best practice and use the assessment of other relevant chapters (such as noise, traffic, air, and water) to describe how these factors may lead to health outcomes of the local population. WSCC would expect to see any EMF effects covered by the assessment work undertaken. WSCC expects to see reference to West Sussex Joint Health and Wellbeing Strategy (2019-2024). This document sets out the vision of the Health and Wellbeing Board, its goals and the ways in which it will work to improve the health and wellbeing for all residents in West Sussex; and • Waste – WSCC would expect to see reference to key principles for how waste will be managed, along with how RED will adopt good construction and management practices to ensure waste is minimised as far as possible. WSCC would expect to see reference to The West Sussex Waste Local Plan (2014) Policy 23, '<i>Waste Management within Development</i>'; and • Climate change – WSCC agrees that the likely significance effects should be included within topic specific assessments.
General	<p>WSCC understands the outputs of the EIA will be presented in a Preliminary Environmental Information Report (PEIR) and thereafter the final ES and associated documents in support of the DCO application. WSCC request that RED commit to the PEIR being a full draft ES and include full assessments for topics wherever possible. This will allow WSCC and other stakeholders the opportunity to provide detailed</p>

	feedback and subsequent input prior to application. The final ES would therefore provide only updates to the assessments to take account of any final information and stakeholder feedback.
4.4.28 – 4.4.38	<p>WSCC welcomes the undertaking of the CEA in accordance with the guidance noted in 4.4.29. Very early discussions with RED have been held outlining some of the potential developments within the vicinity of the Proposed Development. WSCC expects to be consulted during the site selection process upon developments within the planning system in West Sussex, as only some of which are referred to in paragraph 4.4.32, and there is potentially a number of others to be considered known at this stage) to aid constraints mapping and during the long list of CEA projects being drafted. WSCC would also like the following to be taken into consideration:</p> <ul style="list-style-type: none"> • Lyminster Bypass . Approved WSCC application – yet to commence construction); • Restoration proposals (involving the import of large volumes of inert Waste) at several sand extraction sites in the Storrington/Washington area (Sandgate park, Washington Sand Pit, Rock Common); • Solar infrastructure near Bolney substation, a MSDC application); • Housing proposals at Climping and at Ford.
4.4.36	WSCC is unclear whether these projects short listed (after screened long list) will be assessed and results presented at the PEI stage, and then updated where required for the ES? Paragraph 4.4.36 is unclear. WSCC would require to be consulted on the long list again prior to submission of the ES at the DCO application stage.
4.5	In terms of structure of the ES, see comments above with regards to scope for Human Health, Climate Change and Waste. The EIA work will inform and/or relate to a number of other documents, plans and strategies which would be included in the overall suite of DCO documentation. WSCC expect to see a draft list of potential other DCO documentation such as OLEMS, CoCP, Construction Traffic Management Plan, CEMP, Operational Noise Management Plan, Ecological Landscape Management Plan, PRoW Strategy etc. WSCC would like to see this provided as part of the PEIR.
5 Environmental Aspects Offshore	
5.11 Nature Conservation	
5.11.14	Non-statutory site designations appear to have been omitted from the assessment of the offshore elements. Marine Local Wildlife Sites (formerly known as Marine Sites of Nature Conservation Importance) should be considered as potential constraints. For example, there are two Marine LWSs close offshore between Bognor Regis and Littlehampton, The Waldrons Marine LWS and Shelley Rocks Marine LWS; and further offshore, HMS Northcoates Marine LWS. WSCC wishes RED to consider these as part of the assessment work going forward.
5.13 Seascape, Landscape and Visual (offshore)	
5.13.2	SLVIA will also interface/interact with other technical topics of the EIA, including shipping and navigation, other marine users etc. WSCC wish to see these interactions fully outlined in the PEIR.
5.13.10	WSCC refers RED to responses from the relevant district and borough councils and their landscape experts, including with regards to the proposed SLVIA study area of 50km. The study area should be based upon the extent of likely impacts, rather than an arbitrary figure, (i.e. using that based upon other windfarms, such as East Anglia ONE North and East Anglia TWO). A full justification of the study area chosen and

	assessed, in keeping with the outlined technical guidance, should be discussed with key stakeholders as part of Expert Topic Group (ETG) meetings at an early stage and presented transparently within the PEIR/ES.
General	The key concerns for SLVIA relate to the potential visual impacts to the SDNP, the Sussex Heritage Coast and key visual receptors within West Sussex and beyond, which must be robustly assessed, along with the cumulative effect of Rampion 1 and other development in the area. WSCC would expect all viewpoint locations to be discussed and agreed with relevant stakeholders prior to any further development of the assessment.
5.13.26/5.13.85	WSCC expects RED to consult all relevant stakeholders on the development of the visual baseline as described in section 5.13.26, including identifying the extent of possible ZTVs, identifying the receptors that may be affected, and selecting a range of suitable viewpoint locations. As stated by RED, it is important to note that Rampion 2 will be visible from areas that Rampion 1 is not and this must be robustly assessed. WSCC would also like to note that some viewpoints must be considered to also rule out affected views to give confidence to the local communities and stakeholders of West Sussex and beyond. See below for specific comments in regard to the ZTVs presented in the Scoping Report.
Figure 5.13.6/15.13.88	<p>WSCC would make comment that, as noted in the Scoping Report, the proposed WTGs for Rampion 2, will be larger and potentially covering a larger expanse than Rampion 1, based upon the offshore Scoping Boundary. WSCC is therefore concerned that there are fewer identified viewpoint locations for the SLVIA than was undertaken for Rampion 1.</p> <p>5.13.88 highlights key visual receptors but does not then provide associated viewpoint locations to assess the impact upon these receptors in Figure 15.13.6. Therefore, WSCC wishes to note the following:</p> <ul style="list-style-type: none"> • Figure 15.13.6 shows a number of viewpoints identified in West Sussex in the coastal and inland eastern areas, but a very limited number/concentration to the west of the County. WSCC would like to fully understand the reasoning for this, especially as a large proportion of the offshore Scoping Boundary is to the western side and the theoretical visibility indicates views from this area. WSCC expects this to be discussed as a priority prior to further assessment work being undertaken; • Tourist and Visitor locations highlight popular beaches like Lancing and Shoreham, but some appear to have been missed (e.g. Climping Beach - the proposed landfall location). This should be reviewed. Further it is noted that the only viewpoint identified near Shoreham is VP9 on the A259 which is set back from the coast and may not be representative for both 'Main road routes' and 'Tourist and Visitor attractions' in this area; • Main Routes section highlights the principle highway routes, the A259 and also the A27, which may experience '<i>limited scope for views</i>'. WSCC would question whether a key route as this should be included as a viewpoint at a suitable location along its route; • Reference to potential views for users of the Downs Link has not been mentioned in paragraph 5.13.88; • Although not listed in the key visual receptors, consideration should be given to those heritage assets identified in section 6.9, and the potential for any visual disturbance to views and setting; and

	Based upon statement in 5.13.85 (<i>Rampion 2 will be viewed from areas where the existing Rampion 1 isn't.....these include areas of Low Weald and High Weald..</i>) it should be considered that a viewpoint location from the more northern extent of the Scoping Boundary be chosen to illustrate the view of the WTGs from this area (near the AONB). Viewpoint 26, Low Weald is the most northerly considered.
Table 5.13.1	WSCC expects the Landscape Character to be assessed at all levels, including National, County and District. The table doesn't specifically mention the Strategy for the West Sussex Landscape https://www.westsussex.gov.uk/media/1771/landscape_strategy.pdf . WSCC also refers RED to the Local Distinctiveness Study of West Sussex: https://www.westsussex.gov.uk/land-waste-and-housing/landscape-and-environment/local-distinctiveness-study-of-west-sussex/
5.13.88	Comments on potential Seascape and Landscape impacts including special qualities of the SDNP will be provided by the SDNPA.
5.14 Marine Archaeology	
General	Although Historic England are providing marine archaeological planning advice to the Secretary of State, WSCC has an "interface" with marine archaeology, in that WSCC hold maritime archaeology information on our HER database. The WSCC response to Marine Archaeology is therefore limited to these factors only.
Table 5.14.7	C-57, the Marine Written Scheme of Investigation (also referred to at 5.14.48) should include clear procedures for the reporting of the findings of the surveys to be carried out to the West Sussex HER. These procedures should be included within the ES.
Table 5.14.7	C-59 (staged geoarchaeological assessment) should include desk-based deposit modelling by a geoarchaeologist before the carrying out of the offshore geotechnical survey, and an updated model once the geoarchaeological survey has been carried out. It should (a) be carried out by a geoarchaeologist thoroughly familiar with the Pleistocene geological sequence of the West Sussex coastal plain, and (b) should clearly interface with the desk-based geoarchaeological assessment proposed in 6.9.8 for the onshore Study Area. These procedures should be included within the ES.
5.14.49	The proposed Protocol for Archaeological Discoveries should include a regular online Blog on this subject, with updates. WSCC strongly recommends this for the period of investigation and post-investigation works. Much public interest in the discoveries should be expected. Relevant procedures should be included in within the ES.
Table 5.14.8	It is understood that the proposed scoping out of these impacts is based on a strategy of avoidance of undersea marine archaeological receptors of a medium or high archaeological potential (5.14.36), informed by existing desk-based information for known receptors, and by geophysical and geoarchaeological assessment for presently unknown archaeological receptors. On the basis of the proposed primary, secondary and tertiary mitigation measures proposed for marine archaeological receptors (5.14.44 – 5.14.49), the proposed scoping-out is acceptable.
5.15 Socio-economics	
General	WSCC expects RED to take account of the current WSCC Economic Growth Plan

	<p>2018-2023 https://www.westsussex.gov.uk/media/11971/economic_growth_plan.pdf) and the WSCC emerging Economy Reset Plan, which draws on the existing Economic Growth Plan and additionally reflects those areas where additional focus is proposed due to the impact of COVID-19 on the West Sussex economy.</p>
5.15.23 and 5.15.43	<p>WSCC is pleased to see the points raised at an earlier stage of consultation process have all been considered. Namely the importance of consultation with the SDNPA and also careful consideration of the WSCC promoted routes potentially affected by the Proposed Development, namely the Downslink. It is positive to see inclusion of reference to a PROW Strategy, as with Rampion 1, this was considered very useful having a procedure of how to deal with PROW issues from the earliest opportunity.</p> <p>In relation to 5.15.43, this appears to refer to the South Downs Way and then the Downslink and the way it is written seems to tie them both in together. It is important to differentiate between these two routes as they are two separate entities, one managed by the SDNPA and the other managed by WSCC, albeit both very important promoted routes across the County.</p>
5.15.3	<p>RED states that <i>'as the project progresses....scenarios considering the use of local ports and project expenditure captured by local businesses will be developed'</i>. Can RED confirm whether further details will be available during the DCO application stage?</p>
5.15.10	<p>Project development should draw heavily on the experience of procurement/construction and operation of Rampion 1 where appropriate.</p>
5.15.12	<p>Potential impacts of or those associated with the Proposed Development in terms of the tourism economy should be drawn heavily upon the existing Rampion 1, and upon similar projects of this nature. WSCC highlights a literature review gathered by ScottishPower Renewables (SPR) for East Anglia TWO and East Anglia ONE North in Chapter 30, Tourism, Recreation and Socioeconomics of the Environmental Statement - <i>Literature Review: Windfarm Impact on the Tourism Industry</i>.</p>
5.15.14	<p>Reference should be made to WSCC Rights of Way Management Plan 2018-2028, which sets out the approach by WSCC to managing the Public Rights of Way (PROW) network over the next ten years. https://www.westsussex.gov.uk/land-waste-and-housing/public-paths-and-the-countryside/public-rights-of-way/rights-of-way-management-plan-2018-2028/</p>
5.15.25	<p>WSCC would want to see reference made to data for West Sussex, presented by the Public Health and Social Research Unit, responsible for the Joint Strategic Needs Assessment (JSNA): the evidence base that underpins strategic Public Health decision-making in West Sussex by WSCC and its partners. https://jsna.westsussex.gov.uk/</p>
Table 5.15.15	<p>WSCC welcomes the commitments from RED in C-34 and C-35 that the opportunities for local people and businesses during the construction and operational phases of the Proposed Development in West Sussex will be maximised. WSCC wishes to work with RED to identify approaches to maximise this commitment.</p>
General	<p>WSCC will expect consultation through the project development stages on ways to maximise the community benefits to West Sussex, in light of experience from Rampion 1 and the Community Benefit Fund. WSCC would want to see Areas of Benefit being targeted to the areas of the final project boundary, which experience a greater degree/duration of impacts (e.g. permanent electrical infrastructure, at the substation area, key tourist/recreational locations with affected views). WSCC would</p>

	want to see a sustainable approach to the re-use of materials once no longer needed on site, including reuse of fencing, haul road surface material, gates for PRoW etc and for all opportunities in this area to be maximised.
6 Environmental Aspects Onshore	
6.2 Landscape and Visual Amenity	
General	WSCC wishes to see a clear and robust site selection process which allows landscape and visual impacts to be minimised as much as possible at an early design stage. This is even more important within the onshore substation search area, where there is potential for a greater degree of visual disturbance from above ground infrastructure. WSCC wishes to see early engagement with key stakeholders and the local communities in this substation search area (to include Parish Councils, County and Local Councillors, Rampion 1 Substation Liaison Group) with regards the options for siting the substation.
General	WSCC refers RED to responses from the District and Borough councils and their relevant experts regarding LVIA matters. SDNPA will comment on potential impacts to the South Downs National Park, including special qualities, and High Weald AONB will be covered by High Weald AONB Partnership. WSCC will however expect to be involved in these discussions moving forward.
6.2.5	Section 6.2.8 states that the development of the LVIA study area is based upon professional judgment, early understanding of the local landscape character and the scale of construction and development proposed. WSCC would question whether the study area should be wider at the substation end of the onshore Scoping Boundary, as this area will not only encompass the cable route, but also above ground infrastructure and should therefore be taking account of wider long distance viewpoint locations. This is especially relevant at this stage, as the maximum heights of the substation building (s) have not been presented as part of the Project Description section of Scoping stage documentation (although WSCC note an indicative height is mentioned in 6.2.39). These wider area viewpoints are mentioned in section 6.2.5 but not indicatively shown in Figure 6.2.1. WSCC wishes to note the importance of the study area capturing the sensitive receptors which could also be affected by the cumulative visual effects of the Proposed Development along with Rampion 1 and other relevant infrastructure in the locality.
General	WSCC would expect the development of the LVIA study area and identification of viewpoint locations to be discussed with all relevant stakeholders prior to further development of the assessment work. The development of viewpoint locations should also take into account the other technical disciplines outlined in paragraph 6.2.2, for example heritage features, recreational and tourist attractions and ecological features.
Table 6.2.2. data sets	WSCC expects the Landscape Character to be assessed at all levels, including National, County and District. The table doesn't specifically mention the Strategy for the West Sussex Landscape: https://www.westsussex.gov.uk/media/1771/landscape_strategy.pdf . WSCC also refers RED to the Local Distinctiveness Study of West Sussex: https://www.westsussex.gov.uk/land-waste-and-housing/landscape-and-environment/local-distinctiveness-study-of-west-sussex/
6.2.39	High Weald AONB is shown in Figure 6.2.3 to be in the study area for LVIA, however section 6.2.39 state that this is beyond the study area.
6.2.48	This is the first mention of the onshore substation proposed dimensions of 150m x

	300m with a maximum height of 14m. This detail was not stated within Chapter 2 Proposed Development. Will RED be using these dimensions for the site selection process and as part of the maximum design envelope dimensions for the EIA, or will there be a commitment to try and reduce this prior to PEIR? A clear statement on this throughout all relevant assessments is needed to better understand potential impacts to the receptors in the surrounding area at this stage.
Table 6.2.3	C-1, states that the onshore cable route will be buried along its entire route 'where practicable', can RED confirm that this will be undertaken, as other parts of the report, the 'where practicable' is not included. C-3, will RED commit to a general reduced working width dimension, or will this be site specific? C12 – WSCC expects to see a Soil Management Plan within the CEMP. C68- WSCC welcomes the reference to West Sussex Land Management Guidelines. WSCC expects to see an Onshore Substation Design Principles document produced for the PEIR/ES stage, which will detail the design principles underpinning the design of the operational onshore substation. WSCC understands that the development of any landscape mitigation proposals will be developed through the LVIA and presented in the PEIR/ES. However, WSCC will want to understand if any screening bunds, terracing of the land, sinking in the onshore substation will be likely when these plans have been further developed, and the likely environmental effects of such measures.
6.2.51	With regards temporary lighting, WSCC would wish to see lighting directed downward and not pointed in the direction of any close by receptors. Lighting should be turned off and retracted when not needed. Passive infrared sensor (PIR) activated lighting should be installed where safe to do so. WSCC would want to see reference to this in the PEIR/ES. With regards to the operational lighting requirements at the onshore substation, good lighting practice in accordance with the recommendations of the Institute of Lighting Professionals (ILP) and Society for Light and Lighting (CIBSE) as well as the Bat Conservation Trust should be referenced.
6.2.51	WSCC notes the strategy to replace hedgerows, i.e. where the cable route will result in the disturbance of hedgerows, their removal will be kept to a practical minimum with replacements being planted and fenced off during the first planting season following construction. WSCC wants RED to assess the visual and ecological impact of when the cable route acts as the haul road (maintaining access), therefore slowing down this replacement and increasing the duration of this impact.
6.2.82	WSCC welcomes the use of visualisations to aid the assessment process. WSCC would expect these to be used to help with consultation on specific sensitive views with the local communities in West Sussex. This could be particularly important for any cumulative effects of the Proposed Development with specifically Rampion 1 and then also with other development in the local environment.
6.3 Air Quality	
General	WSCC refers RED to responses from the relevant District and Borough Councils and Environmental Health Officer regarding air quality matters.
General	Each district or borough council with an Air Quality Management Area (AQMA) is required to produce an Air Quality Action Plan (AQAP) to tackle the emissions. AQMAs in West Sussex are listed here: https://www.westsussex.gov.uk/roads-and-travel/traffic-management/air-quality/
Table 6.3.2	Reference should be made to ' <i>Breathing Better a partnership approach to improving air quality in West Sussex</i> ' (May 2018). WSCC and all West Sussex District and Borough Councils are committed to ensuring that the County is a healthy place to

	<p>live. Improving air quality is a target in the West Sussex Plan (The West Sussex Plan covers the 5 years between 2017 and 2022. It outlines how the WSCC proposes to develop its services).</p> <p>http://www2.westsussex.gov.uk/ds/mis/110718env4a.pdf</p> <p>WSCC also makes reference to ‘Air quality and emissions mitigation guidance for Sussex’ (2019) http://www.sussex-air.net/Reports/Sussex_AQ_Guidance_2019.pdf</p>
Table 6.3.2 and Table 6.3.5	<p>Designated ecological sites should also be included as potential receptors sensitive to changes in air quality. Table 6.3.5 mentions this as 200 m of affected roads, but also should reference distance from the construction works that ecological receptors maybe affected. Reference should be made to Centre for Ecology and Hydrology (CEH) Air Pollution Information System (2019) if relevant for assessment purposes.</p>
6.3.31	<p>RED state that ‘Emissions of odour from the construction and decommissioning phases have been scoped out of the air quality assessment. No likely sources of odour have been identified, the short duration of construction activity at any given location (embedded measure C – 19) and the avoidance of historic landfill sites and of sensitive receptors along the route (embedded measure C – 6) mean that the risk of causing significant odour impacts at human receptors is very low’. Commitment C-6 states that historic landfills will be avoided ‘where practical’. Based upon the presence of known historic landfills in the Scoping Boundary, as per Figure 6.8.2 (which should be referenced as 6.8.1 – see separate comment) will RED commit to these being avoided and therefore this potential effect can be scoped out confidently?</p>
6.3.46	<p>With regards to the assessment of road traffic, WSCC would encourage RED to include as much assessment as possible in the PEIR rather than presenting just in the ES, as this provides a better chance for stakeholders to comment and understand the likely significant effects at an earlier stage.</p>
6.4 Soils and Agriculture	
6.4.6	<p>WSCC wishes to see the minimisation of impacts whether short, medium, or long term upon the agricultural resource within the County, as per National Policy Statement for Energy (EN-1), minimisation of impact to Best and Most Versatile agricultural land. WSCC wishes to see the permanent loss of agricultural land at the onshore substation site be minimised through the site selection and design phases.</p>
Table 6.4.2	<p>WSCC would want clarity on how the magnitude of change of any impact in this assessment is defined considering the potential timescales for the recovery of soils, as well as the size in hectares stated.</p>

General	<p>WSCC wishes to see the following guidance taking into consideration for the purposes of the assessment for soils and agriculture:</p> <ul style="list-style-type: none"> • Department for Environment, Food and Rural Affairs (Defra) (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites; • Defra (2016) Waste Management Duty of Care Code of Practice; • MAFF (2000) Good Practice Guide for Handling Soils; • MAFF (1991) Practical Guide to Preventing the Spread of Plant and Animal Diseases; • Environment Agency (2010) Managing Invasive Non-native Plants; • Natural England (2012) Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural land; and • Defra (2003) Biosecurity Guidance to Prevent the Spread of Animal Diseases.
Table 6.4.4.	<p>WSCC wishes to see other key sources of data added to the table of soils and agricultural data where relevant, including:</p> <ul style="list-style-type: none"> • Details of farming practices (collected as part of baseline surveys and from project land agents); • Invasive species records; • Environmental Stewardship schemes data; and • Cranfield University Soil data.
Table 6.4.6	<p>WSCC notes C11, the storage of top and sub soil in the working corridor of the cable route. WSCC welcomes the reference to Defra 2009 Code of Construction Practice (COCP) for the Sustainable Use of Soils on Construction Sites PB13298. However, from experience of Rampion 1, storage times for some stockpiles of soil were lengthy, and therefore a contingency should be considered. WSCC would expect to see a Soil Management Plan as part of the CEMP.</p>
Table 6.4.7	<p>There is also the potential for adverse impacts to farming practices through the temporary loss of land availability, restricted access and disruption caused by temporary working areas and construction traffic, as well as to the soil resource itself.</p>
Table 6.4.7	<p>Will RED be assessing the potential impact of soil heating during the operational phase also?</p>
6.4.38	<p>WSCC wishes to see acknowledgement from RED to consult with potentially effected landowners within West Sussex at an early stage once the project design is further developed.</p>
6.4.43	<p>Will the soils and ALC surveys be fed into the PEIR assessments to allow for a robust presentation of impacts at that stage?</p>
6.5 Noise and Vibration	
General	<p>The approach to the identification of Noise Sensitive Receptors and monitoring locations for baseline monitoring should be agreed with all relevant stakeholders (in particular Environmental Health Officers) prior to any further development of the assessment.</p>
6.5.10	<p>WSCC would wish to further understand the establishment of the baseline, as it is not clear how this would consider the creeping impact at the substation site. The experience from Rampion 1 onshore substation is that it has already increased noise levels from that assessed. Further discussion is needed on the methodology and scope for this.</p>

6.5.12	RED previously did noise monitoring throughout the construction period at the substation for Rampion 1, so WSCC wishes to ensure lessons are learned from the process and to ensure that modelling for construction noise was/will be accurate.
6.5.13	WCSS notes and welcomes that monitoring for sensitive receptors close to HDD sites along the cable route will also be undertaken.
Table 6.5.1	WSCC requests RED looks at the specific vibration receptors, (as well as noise sensitive receptors) to see if more specific categories should be included.
General	WSCC wish to reiterate that there will be some particularly sensitive receptors within the substation search area due to the duration of impacts already experienced as a result of Rampion 1 construction and operation. The assessment of this cumulative impact with the construction/operation of Rampion 2 is vital as part of the site selection process (in deciding on the location of the substation and associated infrastructure), and as part of a detailed, robust EIA.
Table 6.5.4	<p>With regards to construction working hours, WSCC refers to the commitments made in the Rampion 1 Construction Environmental Management Plan (CEMP), Table 21, where it states <i>'To limit disturbance at night and on weekends, the DCO limits construction works across the site to:</i></p> <ul style="list-style-type: none"> • <i>Monday to Friday 0700 to 1900;</i> • <i>Saturdays 0800 to 1300; and</i> • <i>No works on Sundays, bank holidays or public holidays. The same general hours apply to the substation but unloading and construction works are reduced to the hours of 0800 to 1800 on weekdays. WSCC also refers to Section 10.5.2 where it states 'The relevant EHO at the local authority will be informed of works required outside of times specified within this document. If essential works are required outside of working hours, a written request will be issued to the authority 72 hours before the proposed event'. The request will include details of the affected:</i> <ul style="list-style-type: none"> • <i>Location;</i> • <i>Type of works;</i> • <i>Duration and time of works; and</i> • <i>Explanation of the works.</i> <p>With regards the advance notification required for works undertaken outside of these times, WSCC would wish to discuss the wording of this commitment to allow for a more flexible approach on the process for this notification, once the project has been further developed and the receiving environment is better understood. WSCC would wish to see an outline presented in the PEIR/ES of any likely 24 hour or continuous construction activities (e.g. SGT deliveries and oil filling, concrete pours etc). Learning the local issues arising from construction at the substation for Rampion 1, WSCC note the disruption caused by reversing beepers on construction vehicles and would like discussions on alternative options for this in due course.</p>
General	Based on the experience of Rampion 1, where there were instances of overrun in the construction programme for certain activities and locations, WSCC would wish to see this captured in assessments undertaken for the Proposed Development, and durations for certain activities should be reflected to take account of this.
General	WSCC reiterates the importance of sensitive placement of the substation, in relation to noise sensitive receptors in the substation search area, which should be included as a key avoidance principle in the site selection process. WSCC would also want to see as part of the site selection process, consideration of the orientation of the substation in relation to the nearby PRowS and sensitive receptors, with the louder noise emitting plant sited away from these receptors.

General	Noise and Vibration impacts must also be considered for ecological and historic environment receptors and cross referenced in the PEIR/ES where necessary.
General	Assessments undertaken as part of the EIA, need to reflect the construction locations where there will likely be a more prolonged impact (some less transitory than others) e.g. construction compounds, HDDs, landfall, substation, areas where access is only via haul route in the cable corridor.
6.6 Terrestrial Ecology and Nature Conservation	
General	Whilst arboriculture <i>per se</i> is not dealt with in any standalone chapter of the Scoping Report, it has relevance within the terrestrial ecology and nature conservation and LVIA sections where trees, woodlands and hedgerows are considered.
Approach to ecological assessment	WSSC is satisfied with the general approach to assessing ecological impacts. There are a large number of ancient woodlands, over 600 water bodies, networks of hedgerows and ditches and other important habitats within the Scoping Boundary. Many of these are outside of designated sites. These will require detailed assessment in order to inform the routing of the cable route and construction methods.
General	WSSC notes the strategy to replace hedgerows, i.e. where the cable route will result in the disturbance of hedgerows, their removal will be kept to a practical minimum with replacements being planted and fenced off during the first planting season following construction. WSSC wishes RED to assess the ecological impact of when the cable route acts as the haul road (maintaining access) in certain locations, therefore slowing down this hedgerow replacement and increasing the duration of this impact.
Table 6.6.4	In addition to those data sets identified, the Mid Arun Valley Environmental Survey (MAVES) has collected a significant amount of ecological survey data for the Arun Valley, including bat surveys (https://www.aruncountryside.org/). Furthermore, Highways England has been collecting ecological data in regard to the proposed A27 Arundel scheme. Some of these datasets are very recent and probably not held by the Sussex Biodiversity Record Centre.
Table 6.6.6	WSSC notes that Hedgerows Regulations Assessment surveys and arboriculture surveys in accordance with BS5837:2012 will be undertaken. WSSC is satisfied with the specified extent of the study area for both of these. However, the summary for the arboriculture survey seems to suggest that the survey may not include all trees but rather only those mature (including veteran) trees which may be at risk of removal. It should be made clear that the survey will include all trees with a stem diameter of 75mm or more measured at 1.5m above the highest adjacent ground level (ref. 4.2.4 BS5837:2012).
Table 6.6.6	In terms of other potentially important species within the Scoping Boundary, WSSC wishes to note a rare native tree, the black poplar (<i>ssp betulifolia</i>), is known in a few locations in the Arun Valley. It should be verified whether any black poplars are known from within the Scoping Boundary. Additionally, tree surveys should seek to identify any new sites for this species.
General	Hedgerow and other potential ecological surveys, along with the ecological assessment itself, need to consider any proposed temporary accesses, including the visibility splays associated with these.
Table 6.6.12	It is reassuring that in defining the importance of ecological features, all habitats within the Scoping Boundary with a level of importance of local and above will be scoped in for assessment. It is the understanding of WSSC that all Habitats of Principal Importance (hedgerows, some woodland types, and ancient trees) will be

	included, not just defined ancient woodland and veteran trees.
6.6.58	WSCC welcomes the commitment that the experience and lessons learnt from the existing Rampion 1 project in terms of habitat restoration will be carried forward.
6.6.73	WSCC recommends that The Sussex Ornithological Society (https://www.sos.org.uk/) is consulted for advice on impacts on birds, such as Bewick's swans and barn owls.
General	WSCC expects to see biodiversity net gain from the Proposed Development and will want to see a robust Section 106 to ensure mitigation of the identified impacts where they would extend outside of the DCO limits.
6.7 Transport	
6.7.4 and 6.7.5	The study area as shown on Figure 6.7.1 is quite extensive with there being relatively little information provided in terms of anticipated vehicle movements at this stage Scoping stage. For the most part, any increase in vehicle movements on the classified roads is likely to be immaterial in capacity terms when viewed against existing flows. The main concern would be on vehicle increases on those unclassified roads, especially those roads leading into the South Downs from the A27 and from the B2139, and those leading into Climping where the cable route reaches landfall. WSCC Highways would wish to comment further as the exact details of routing become clearer.
General	WSCC Highways have relatively few comments at this stage. WSCC Highways are primarily concerned with the safety and capacity impacts on the highway network with these expected to be reviewed as part of any formal transport statement. As stated in section 6.7.70, it is accepted that the likely number of vehicle movements would be such that a transport assessment would be unnecessary. Details of the WSCC Transport Assessment Methodology can be found here: http://www2.westsussex.gov.uk/roadsandtransport/WSCC%20Transport%20Assessments%20-%20Guidance%20on%20Methodology%20for%20Developers.pdf The scope of any transport statement would need to be agreed with WSCC in due course along with those matters covered under 6.7.56. The expectation is that the transport statement would be focussed on the construction phase along with it accepted that when in operation the windfarm would generate relatively little in terms of vehicle movements. A Construction Traffic Management Plan (CTMP) would also be required. This would detail all temporary works and mitigation required to enable the construction of the on-shore works and proposed routing of construction traffic on the public highway. Some consideration may be required to account for seasonal increases in traffic flows particularly along the coastal strip and along certain access roads. Depending on the nature of any proposed vehicular accesses (either temporary or permanent), Road Safety Audits based on GG119 may also be required. WSCC Safety Policy can be found here: https://www.westsussex.gov.uk/media/5556/roadsafety_auditpolicy.pdf
Figure 6.7.1	There also appears to be an error on Figure 6.7.1 with Ford Road (which runs between the A259 and the A27 at Arundel) shown as indicated as an A or B classified road, whereas it is neither. There's also signage at the Arundel end of Ford Road advising that it is unsuitable for HGVS to travel southbound. The figure should be corrected for any future documentation.
6.7.3 and Table 6.7.5	There is also no road classified as the A248 as noted in Table 6.7.5 within West Sussex nor any junction between the A24/A297. This should be corrected for any future documentation.
Table 6.7.7	C-18, WSCC expects to see a crossing schedule produced as part of the PEI and ES

	documentation, not just for CoCP and DCO discharge stages to allow robust assessment of impacts.
6.7.56	WSCC expects to be consulted upon for all the elements listed, including full scope of assessment, restrictions to data collection, proposed traffic generation, traffic future growth, PRoW management at crossings and the likely requirements for road closures and temporary traffic lights (and all required permits to enable these). WSCC notes for Rampion 1, temporary traffic lights at the substation have been installed for several years and are still present on site currently.
General	WSCC expects transport to be a key feature in determining the location/access of the onshore substation site and will expect consultation during the site selection process on this as well as access points from the highway onto haul routes for the cable construction. WSCC advises that Bob Lane near the substation at Bolney is a constrained route, and its use by large vehicles is sensitive in the locality.
General	WSCC would wish to discuss the likely need and scope for Abnormal Indivisible Loads (AILs) as part of the construction programme, as this is not outlined in this section.
6.8 Ground Conditions	
6.8.1	WSCC understands that RED will adopt good construction and management practices to ensure waste is minimised as far as possible and that the storage, transport and eventual disposal of waste have no significant environmental effects. Will any reference to waste management (as stated in section 4.4.22 a specific chapter designated for this will not be produced) be made in this chapter in terms of how these adopted approaches will be managed?
6.8.30	Figure 6.8.1 has been labelled as 6.8.2 (Historic and authorised landfills).
Table 6.8.8.	With regard commitments such as C – 8 – refuelling and C-76 – storage of fuels, oils, and other chemicals, and pollution response planning, WSCC would want to see these further developed for PEIR, including examples such as <i>‘Oils and fuel are stored within designated areas at least 10m from any watercourse in impervious storage bunds with a minimum of 110% capacity to contain any leakages of spillages’</i> .
General	The role of WSCC also includes that of the minerals/waste planning authority and would therefore expect to see ‘The West Sussex Waste Local Plan (2014)’ and ‘West Sussex Joint Minerals Local Plan’ (2018) considered.
General	WSCC wishes RED to take account of the WSCC Minerals and Waste Safeguarding Guidance (2020) https://www.westsussex.gov.uk/media/13437/mw_safeguarding_guidance.pdf RED should review Appendix D, Mineral and Waste Consultation Area Maps, which list consultation areas for a number of parameters. RED should be aware the Scoping Boundary passes through a soft sand resources consultation area, a rare resource, the potential for sterilisation of which need to be firstly avoided where possible and secondly assessed within the EIA. Others consultation areas to be considered are the Chalk Quarries, Aggregate recycling Sites, allocated and permitted waste sites.
6.9 Historic Environment	
6.9.2	Reference to the interfaces between the Historic Environment assessment, LVIA and Noise and Vibration is very much welcomed; visual and noise-related impacts may have significant effects upon the settings of Heritage Assets. The last bullet point of 6.9.8 makes similar and welcomed reference. As per comment in 15.13.88 and those in section 6.2, consideration must be given for LVIA viewpoint locations from identified heritage assets.

<p>6.9.8</p>	<p>For areas of woodland which would be directly affected by the route, at the specific route option stage, new LiDAR survey may be required to obtain high-resolution data. The review of readily available Lidar data should identify (a) parts of the Study Area where LiDAR data is and is not readily available; and (b) should make clear where possible archaeological features identified by LiDAR lie within woodland. These procedures should be referred to in the PEIR/ES.</p>
<p>6.9.8</p>	<p>The proposed deposit modelling is welcomed. It should (a) be carried out by a geoarchaeologist thoroughly familiar with the Pleistocene geological sequence of the West Sussex coastal plain, (b) should clearly interface with the desk-based geoarchaeological assessment proposed above for the marine archaeology Study Area (Table 5.14.7, measure C-59), and (c) should include the Arun Valley, where the depth (40 me plus) of post-glacial river deposits, with expected still deeper-down late glacial river deposits, may preclude complete avoidance or minimisation of harm from HDD. These procedures should be referred to in the PEIR/ES.</p>
<p>6.9.8</p>	<p>In addition to geoarchaeological monitoring of ground investigation works, archaeological investigation should include where necessary investigation (boreholes/ test pits) carried out by a geoarchaeologist specifically for the purposes of geoarchaeological assessment. These procedures should be referred to in the PEIR/ES.</p>
<p>Table 6.9.4</p>	<p>The table should include as a source, the Historic England Archive, maintained by Historic England, which is the source for historic aerial photography. This may provide information on historical and archaeological sites within the Study Area, e.g. crop marks of archaeological sites and wartime anti-invasion sites and military/ prisoner of war camps and airfields. Only some of which are recorded on the West Sussex HER database. The results from studying the historical aerial photography should be included in the PEIR/ES.</p>
<p>Table 6.9.4</p>	<p>In relation to the Historic England Archive (see above), the following online reports and publications should be studied for information relevant to the Study Area and the findings included in the PEIR/ES:</p> <ul style="list-style-type: none"> • Online document “South East Rapid Coastal Zone Assessment Survey Phase 1: Desk Based Assessment” (English Heritage, 2013) should be read as a source of information: https://historicengland.org.uk/images-books/publications/se-rczas-phase1-desk-based-assessment • Online document (Archaeology Data Service), Reports 1 and 2 – England’s Army Camps, John Schofield, 2006 https://archaeologydataservice.ac.uk/archives/view/armycamp_eh_2006/overview.cfm
<p>Table 6.9.4</p>	<p>In relation to the West Sussex HER, the following sources, only partly or not yet entered in the HER, should be studied for putting together the desk-based review for the PEIR/ES:</p> <ul style="list-style-type: none"> • Book: - West Sussex under Attack: anti-invasion sites 1500-1990, Chris Butler (Tempus, 2008); and • Geophysical Survey for one route option for the proposed A27 Arundel Bypass, by Sumo Services, 2018 (report not yet released by Highways England).
<p>Figs. 6.9.6 a-d</p>	<p>The presented Historic Landscape Characterisation data from the West Sussex HER should include the period-based “sort” maps, which show which groups of land parcels have been assigned to archaeological and historical periods; for example</p>

	medieval assarts (enclosures from woodland/ waste land) are of archaeological interest, as they may relate to the locations of early settlements. This information should accompany and inform the review of desk-based data (6.9.8) for inclusion in the PEIR/ES.
Table 6.9.5	C-79, one of the “relevant historic environment embedded environmental measures” includes “dissemination”, understood to refer to dissemination of the findings of historic environment surveys and investigations. From experience with Rampion 1, much public interest in the findings of archaeological survey and investigation should be expected. A regular online Blog on this subject, with updates, is strongly recommended for the period of investigation and post-investigation works. This procedure should be referred to in the PEIR/ES.
Table 6.9.5	C-80 should also include a requirement for dissemination of the findings of built heritage survey and recording. This procedure should be referred to in the PEIR/ES.
Table 6.9.5	C-79 and C-80 – These measures should also include provision for curation/ disposition of the Site Archive, in relation to possible intrusive archaeological investigations. It should be noted that where the owner of the finds from possible archaeological investigations consents to their deposition in a museum or archaeological archive repository, local West Sussex museums have indicated that they have no more storage space. More distant archaeological repositories may need to be considered. Relevant museums and repositories may have storage charges, which should also be considered in disposition of archaeological site archives. Relevant procedures should be included in the PEIR/ES.
Table 6.9.6	The “approved Written Scheme of Investigation” for possible archaeological investigations should outline measures for dissemination of information on archaeological surveys and investigations, including a Blog, and measures for disposition of archaeological survey and investigation site archives, taking into account the extreme paucity of local (West Sussex) museum storage space for new archaeological archives. These procedures should be included in the PEIR/ES.
Table 6.9.7	These scoping-out proposals, involving heritage assets out with the Scoping Boundary, are reasonable and acceptable, but should be reviewed if the cable route and their construction corridor are altered to move significantly closer to the Scoping Boundary. This should be considered as the EIA process develops.
6.9.60	WSSCC have no additions or amendments to suggest, unless any electrical infrastructure is sited within Mid Sussex District, in which case the Mid Sussex District Council Conservation Officer should also be a consultee.
6.10 Water Environment	
Table 6.10.3	WSSCC wishes for RED to consider, to be more in keeping with the rest of the EIA for moderate impacts to also be classified as ‘significant’ in EIA terms, rather than ‘potentially significant’?
General	WSSCC as Lead Local Flood Authority (LLFA) is the risk management authority responsible for local flood risk defined as flooding from surface water, groundwater, and ordinary watercourses.

<p>Table 6.10.4</p>	<p>With regards to requirements for the attenuation of water from the proposed infrastructure, WSCC refers RED to ‘West Sussex LLFA Policy for the Management of Surface Water’ (November 2018) that can be found on the WSCC web site, and all the relevant guidance within it. Also, of relevance is the West Sussex Local Flood Risk Management Strategy (2013 – 2018), WSCC strategy, produced in 2013, focuses on:</p> <ul style="list-style-type: none"> • The risks of flooding from surface water, groundwater and ordinary watercourses but also considers flooding from rivers and the seas; • Clarification on which authority is responsible for what in relation to the management of flood risk; and • The defined role of West Sussex County Council as LLFA. <p>https://www.westsussex.gov.uk/media/1595/local_flood_risk_management_strategy.pdf</p>
<p>Table 6.10.9</p>	<p>WSCC welcomes the commitment C-75, which states that construction and permanent development in identified floodplains within the Scoping Boundary will be avoided where possible. WSCC expects any work where this cannot be avoided to be robustly justified through the site selection process, and any mitigation proposed to be compliant with all relevant policies, including the NPPF.</p>
<p>Appendix A: Commitments Register (no further comments at this stage on Appendices B – F)</p>	
	<ul style="list-style-type: none"> • C1- WSCC requires clarification on buried cable route, as C1 states ‘where practicable’, other chapters do not include this comment, and just states for its entire length; • C-12, WSCC requires clarification on the maximum length of time the top and sub soil will be stockpiled within the working corridor, sentence only states ‘practicable minimum’; • C-17- West Sussex Local Authorities are in general opposed to the culverting of watercourses, (as per West Sussex LLFA Culvert Policy) because of the potential for adverse effect on flood risk and ecology; • C-18 – WSCC would want to see this crossing schedule as part of the PEIR/ES; • C-64 – What is this commitment? (states ‘<i>commitment being considered</i>’); • There is no commitment to biodiversity net gain in the list of commitments here which WSCC would expect to see, this will be a point of discussion through the development of the project.
<p>General comments</p>	
	<p>WSCC wishes to see commitments to monitoring in the PEIR/ES where required. It is recognised that monitoring is an important element in the management and verification of the actual proposed impacts. It is understood that the outline management plans, across a number of environmental topics, will be submitted along with the DCO application, a draft list of these should be included in the PEIR.</p>
	<p>All method statements for surveys, investigations and assessment methodology for relevant topics should be consulted upon and agreed with the relevant stakeholders in good time and discussions held on the COVID-19 restrictions in gaining required data.</p>
	<p>WSCC supports using any lessons learnt from the construction and operational phases of Rampion 1. WSCC refers to the comments on this raised during the Joint Consenting Workshop held with South Downs National Park Authority on the 17th September 2019 .</p>

Appendix 1 – Internal WSCC Consultee responses

WSCC Ecology comments

Proposal: Proposed Rampion 2 Offshore Windfarm- EIA Scoping Consultation

Date: 23/07/20

Response

Approach to ecological assessment

The general approach to assessing ecological impacts seems reasonable. There are a large number of ancient woodlands, over 600 water bodies, networks of hedgerows and ditches and other important habitats within the Scoping Boundary. Many of these are outside of designated sites. These will require detailed assessment in order to inform the line of the cable route and construction methods.

Section 2.4.20 (p84) states that: 'This substation, landfall and connecting cable route combination was selected largely due to Climping being in closest proximity to the preferred connection point (relative to other options considered) but also for the following key reasons:

- the lack of statutory designations at the coast and immediately inland in association with the Climping landfall;
- there are no statutory ecological designations along the indicative cable route'

The above is very misleading. As shown in Table 6.6.7, there are statutory ecological designations both at the coast (Climping Beach SSSI and West Beach LNR), and also within Scoping Boundary along the indicative cable route (including Arundel Park SSSI, Chanctonbury Hill SSSI and Amberley to Sullington Hill SSSI).

Section 2.4.26 states that 'The PEIR (Preliminary Environmental Information Report) will present the preliminary findings of the assessment to allow an informed view to be developed of the Proposed Development, the assessment approach that has been undertaken, the likely significant effects and environmental measures proposed.' Thus presumably the PEIR will play a key role in informing the later stages of the assessment process.

The ES should demonstrate that all opportunities have been taken to provide ecological enhancement.

Ecological data

The key datasets and sources of data appear to have been correctly identified. However, in addition, the Mid Arun Valley Environmental Survey (MAVES) has collected a significant amount of ecological survey data for the Arun Valley, including bat surveys (see: <https://www.aruncountryside.org/>). Furthermore,

Highways England has been collecting ecological data in regard to the proposed A27 Arundel scheme. Some of these datasets are very recent and probably not held by the Sussex Biodiversity Record Centre.

Other potentially important species within the Scoping Boundary

A rare native tree, the black poplar, is known from a few locations in the Arun Valley. It should be verified whether any black poplars are known from within the Scoping Boundary. Additionally, tree surveys should seek to identify any new sites for this species.

Stakeholder engagement (Section 6.6.73)

It is recommended that The Sussex Ornithological Society (<https://www.sos.org.uk/>) is consulted for advice on impacts on birds, such as Bewick's swans and barn owls.

Chapter 5.11 Nature Conservation (Offshore)

Non-statutory site designations appear to have been omitted from the assessment of the offshore elements (See Chapter 5). Marine Local Wildlife Sites (formerly known as Marine Sites of Nature Conservation Importance) should be considered as potential constraints. For example, there are two Marine LWSs close offshore between Bognor Regis and Littlehampton, The Waldrons Marine LWS and Shelley Rocks Marine LWS; and further offshore, HMS Northcoates Marine LWS.

Graham Roberts MCIEEM
County Ecologist
Environment & Heritage Team
West Sussex County Council

WSSC ARBORICULTURE response to County Planning consultation:

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Scoping Consultation

Proposal: Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion2 Offshore Wind Farm (the Proposed Development)

Date: 21st July 2020

Summary Response

There is no arboricultural objection to the proposed scoping; the approach is appropriate and sufficient.

Response

Whilst arboriculture *per se* is not dealt with in any standalone chapter of the report, it has relevance within the terrestrial ecology and nature conservation and landscape and visual amenity sections where trees, woodlands and hedgerows are considered.

At Table 6.6.6 Field Survey Programme, page 573 of the report, it is noted that Hedgerows Regulations Assessment surveys and arboriculture surveys in accordance with BS5837:2012 will be undertaken and I am satisfied with the specified extent of the study area for both of these. However, the summary for the arboriculture survey seems to suggest that the survey may not include all trees but rather only those mature (including veteran) trees which may be at risk of removal. This may not be the intention, but it should be made clear that the survey will include all trees with a stem diameter of 75mm or more measured at 1.5m above the highest adjacent ground level (ref. 4.2.4 BS5837:2012).

It is reassuring that in defining the importance of ecological features, all habitats within the scoping boundary with a level of importance of local and above will be scoped in for assessment (Table 6.6.12 Likely terrestrial ecology and nature conservation effects). My understanding, or interpretation of this, is that all Habitats of Principal Importance (hedgerows, some woodland types and ancient trees) will be included, not just defined ancient woodland and veteran trees.

Julie Bolton

County Arboriculturist

Environment and Heritage Team

West Sussex County Council

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Rampion Extension Development Limited (the Applicant) for an Order granting Development Consent for the Rampion2 Offshore Wind Farm (the Proposed Development)

Scoping Consultation.

Historic Environment and Marine Archaeology comments

5.14 – Marine Archaeology

Table 5.14.7 – Page 427 - In the “Relevant marine archaeology embedded environmental measures”, Measure C-57, the Marine Written Scheme of Investigation (also referred to at 5.14.48) should include clear procedures for the reporting of the findings of the surveys to be carried out to the West Sussex HER. These procedures should be included in the Environmental Statement.

Table 5.14.7 – Page 428 - Measure C-59 (staged geoarchaeological assessment) should include desk-based deposit modelling by a geoarchaeologist before the carrying out of the offshore geotechnical survey, and an updated model once the geoarchaeological survey has been carried out. It should (a) be carried out by a geoarchaeologist thoroughly familiar with the Pleistocene geological sequence of the West Sussex coastal plain, and (b) should clearly interface with the desk-based geoarchaeological assessment proposed below (6.9.8) for the onshore Study Area. These procedures should be included in the Environmental Statement.

5.14.49 - Page 433 - Within the proposed Protocol for Archaeological Discoveries should include a regular online Blog on this subject, with updates, is strongly recommended for the period of investigation and post-investigation works. Much public interest in the discoveries should be expected. Relevant procedures should be included in the Environmental Statement.

6.9 – Historic Environment

6.9.2 – Page 663 - Reference to the interfaces between Historic Environment assessment with Landscape and visual assessment

(LVIA) and Noise and vibration is very much welcomed; visual and noise-related impacts may have significant effects upon the settings of Heritage Assets. The last bullet point of 6.9.8 makes similar and welcomed reference.

- 6.9.8 - Page 664 - 3rd bullet point – For areas of woodland which would be directly affected by the route, at the specific route option stage, new LiDAR survey may be required to obtain high-resolution data. The review of readily available Lidar data should identify (i) parts of the Study Area where LiDAR data is and is not readily available; and (ii) should make clear where possible archaeological features identified by LiDAR lie within woodland. These procedures should be referred to in the Environmental Statement.
- 6.9.8 - Page 644 - 5th bullet point – The proposed deposit modelling is welcomed. It should (a) be carried out by a geoarchaeologist thoroughly familiar with the Pleistocene geological sequence of the West Sussex coastal plain, (b) should clearly interface with the desk-based geoarchaeological assessment proposed above for the marine archaeology Study Area (Table 5.14.7, Measure C-59), and (c) should include the Arun Valley, where the depth (40 metres plus) of post-glacial river deposits, with expected still deeper-down late glacial river deposits, may preclude complete avoidance or minimisation of harm from Horizontal Directional Drilling . These procedures should be referred to in the Environmental Statement.
- 6.9.8 - Page 644 - 6th bullet point – In addition to geoarchaeological monitoring of ground investigation works, archaeological Investigation should include where necessary investigation (boreholes/ test pits) carried out by a geoarchaeologist specifically for the purposes of geoarchaeological assessment. These procedures should be referred to in the Environmental Statement.
- Table 6.9.4 - Page 670 - (Key Sources of Historic Environment Data) – The Table should include as a Source the Historic England Archive, maintained by Historic England, which is the source for historic aerial photography, which may provide information on historical and archaeological sites within the Search Area, e.g. crop marks of archaeological sites and wartime anti-invasion sites and military/ prisoner of war camps and airfields, only some of which are recorded on the West Sussex HER database. The results from studying the historical aerial photography should be included in the Environmental Statement.
- Table 6.9.4 - Page 670 - Also in relation to the Historic England Archive (see above), the following online reports and publications should be

studied for information relevant to the Study Area and the findings included in the Environmental Statement: -

- online document “South East Rapid Coastal Zone Assessment Survey Phase 1: Desk Based Assessment” (English Heritage, 2013) should be read as a source of information: link: - <https://historicengland.org.uk/images-books/publications/se-rczas-phase1-desk-based-assessment>
- online document(Archaeology Data Service), Reports 1 and 2 – England’s Army Camps, John Schofield, 2006 – link - https://archaeologydataservice.ac.uk/archives/view/army_camp_eh_2006/overview.cfm

Table 6.9.4 – Page 670 - In relation to the West Sussex HER, the following sources, only partly or not yet entered in the HER, should be studied for putting together the desk-based review for the Environmental Statement: -

- Book: - *West Sussex under Attack: anti-invasion sites 1500-1990*, Chris Butler (Tempus, 2008).
- Geophysical Survey for one route option for the proposed A27 Arundel Bypass, by Sumo Services, 2018 (report not yet released by Highways England).

Figs. 6.9.6 a-d – Pages 689-692 - The presented Historic Landscape Characterisation data from the West Sussex HER should include the period-based “sort” maps, which show which groups of land parcels have been assigned to archaeological and historical periods; for example medieval assarts (enclosures from woodland/ waste land) are of especial archaeological interest, as they may relate to the locations of early settlements. This information need not be added to this Scoping Report but should accompany and inform the review of desk-based data (6.9.8 1st bullet) for inclusion in the Environmental Statement.

Table 6.9.5 - Page 694 - C-79, one of the “relevant historic environment embedded environmental measures” includes “dissemination”, understood to refer to dissemination of the findings of historic environment surveys and investigations. From personal experience with Rampion 1, much public interest in the findings of archaeological survey and investigation should be expected. A regular online Blog on this subject, with updates, is strongly recommended for the period of investigation and post-investigation works. This procedure should be referred to in the Environmental Statement.

Table 6.9.5 - Page 694 - Measure C-80 should also include a requirement for dissemination of the findings of built heritage survey and

recording. This procedure should be referred to in the Environmental Statement.

- Table 6.9.5 - Page 694 - Measures C-79 and C-80 – These measures should also include provision for curation/ disposition of the Site Archive, in relation to possible intrusive archaeological investigations. It should be noted that where the owner of the finds from possible archaeological investigations consents to their deposition in a museum or archaeological archive repository, local West Sussex museums have indicated that they have no more storage space. More distant archaeological repositories may need to be considered. Relevant museums and repositories may have storage charges, which should also be taken into account in disposition of archaeological site archives. Relevant procedures should be included in the Environmental Statement.
- Table 6.9.6 - Page 697, 1st row, page 698, 2nd row - (Likely significant historic environment effects). The “approved Written Scheme of Investigation” for possible archaeological investigations should outline measures for dissemination of information on archaeological surveys and investigations, including a Blog, and measures for disposition of archaeological survey and investigation site archives, taking into account the extreme paucity of local (West Sussex) museum storage space for anew archaeological archives. These procedures should be included in the Environmental Statement.
- Table 6.9.7 - Page 701 - (Effects to be scoped out of EIA) – these scoping-out proposals, involving heritage assets out with the Scoping Boundary, are reasonable and acceptable, but should be reviewed if the cable route and their construction corridor are altered to move significantly closer to the Scoping Boundary. This *caveat* should be referred to in the Environmental Statement.
- 6.9.60 - Page 702 - Expected consultees – no additions or amendments to suggest, unless the route terminus is expected to lie within Mid Sussex District, in which case the Mid Sussex District Council Conservation Officer should also be a consultee.
- Table 7.1 - Page 755 - Summary of activities and impacts to be scoped out of EIA – (Archaeology and Cultural Heritage (Marine)) – it is understood that the proposed scoping out of these impacts is based on a strategy of avoidance of undersea marine archaeological receptors of a medium or high archaeological potential (5.14.36), informed by existing desk-based information for known receptors, and by geophysical and geoarchaeological assessment for presently unknown archaeological receptors. On the basis of the proposed primary, secondary and tertiary mitigation measures proposed for marine archaeological

receptors (5.14.44 – 5.14.49), the proposed scoping-out is acceptable.

Table 7.1 - Page 759 – the proposed scoping-out (Historic Environment) is acceptable but should be reviewed if the cable route and their construction corridor are altered to move significantly closer to the Scoping Boundary. This *caveat* should be referred to in the Environmental Statement.

John Mills

County Archaeologist

Planning Services

West Sussex County Council

WSSCC Flooding and Drainage comments

Amy,

I have reviewed the 'Rampion 2 Scoping report' and would comment as follows this regard to flooding and drainage:

- The Key Constraints section (page 80).
This section considers flooding from rivers and sea as a key constraint but not flooding from surface water or groundwater. Surface water and groundwater is suitably covered in Section 6.10, but should they be mentioned here too?
- Potential obstacles (page 82).
This section considers main rivers as a potential obstacle but not ordinary watercourses. Again, ordinary watercourses are suitably covered in Section 6.10, but should they be mentioned here too?

Section 6.10 covers the water environment well and I'm happy with its content.

Regards,

Kevin

Kevin Macknay

Flood Risk Management – Team Leader

Highways, Transport and Planning

Place Services

West Sussex County Council

WSCC Public Rights of Way comments

Afternoon James,

Many thanks for sending this through and having read the relevant sections to the PROW network I can confirm that the points raised at an earlier stage of this process have all been considered in this report. Namely the importance of consultation with the SDNP and also careful consideration of our promoted routes potentially affected by this proposal, namely the Downslink.

It is positive to see inclusion of reference to a PROW Strategy again, as with the Rampion 1 project, as this was considered very useful having a procedure of how to deal with PROW issues from the earliest opportunity.

The only point I'd make on the text itself relates to paragraph 5.15.43. This appears to refer to the South Downs Way and then the Downslink and they way it is written seems to tie them both in together. It is important to differentiate between these two routes as they are two separate entities, one managed by the SDNP and the other managed by WSCC, albeit both very important promoted routes across the County.

Kind regards,

Nick Scott

Principal Rights of Way Officer

Highways & Transport

West Sussex County Council

WSSC Highways comments

For the purposes of the EIA scope, in transport terms, WSSC Highways would have relatively few comments. WSSC Highways are primarily concerned with the safety and capacity impacts on the highway network with these expected to be reviewed as part of any formal transport statement; as stated in section 6.7.70, it's accepted that the likely number of vehicle movements would be such that a transport assessment would be unnecessary. The scope of any transport statement would need to be agreed with WSSC in due course along with those matters covered under 6.7.56. The expectation is that the transport statement would be focussed on the construction phase along with it accepted that when in operation the windfarm would generate relatively little in terms of vehicle movements. A construction traffic management plan would also be required. This would detail all temporary works and mitigation required to enable the construction of the on-shore works. Some consideration may be required to account for seasonal increases in traffic flows particularly along the coastal strip and along certain access roads. Depending on the nature of any proposed vehicular accesses (either temporary or permanent), Road Safety Audits based on GG119 may also be required.

With regards to the scope, study area as shown on figure 6.7.1 is quite extensive with there being relatively little information provided in terms of anticipated vehicle movements at any stage of the development process. For the most part, any increase in vehicle movements on the classified roads is likely to be immaterial in capacity terms when viewed against existing flows. The main concern would be on vehicle increases on those unclassified roads, especially those roads leading into the South Downs from the A27 and from the B2139, and those leading into Climping where the cable route is indicated to emerge. WSSC Highways would wish to comment further as the exact details of routing become clearer.

There also appears to be an error figure 6.7.1 with Ford Road (which runs between the A259 and the A27 at Arundel) shown as indicated as an A or B classified road, whereas it's neither. There's also signage at the Arundel end of Ford Road advising that it is unsuitable for HGVS to travel southbound. The figure should be corrected.

There is also no road classified as the A248 as noted in table 6.7.5 within West Sussex nor any junction between the A24/A297 (para 6.7.3).

Happy to discuss further as appropriate.

Ian Gledhill