

PLANNING ACT 2008
INFRASTRUCTURE PLANNING
(APPLICATIONS: PRESCRIBED FORMS AND PROCEDURE) REGULATIONS 2009
REGULATION 5 (2) (a)

PROPOSED PORT TERMINAL AT FORMER TILBURY POWER STATION

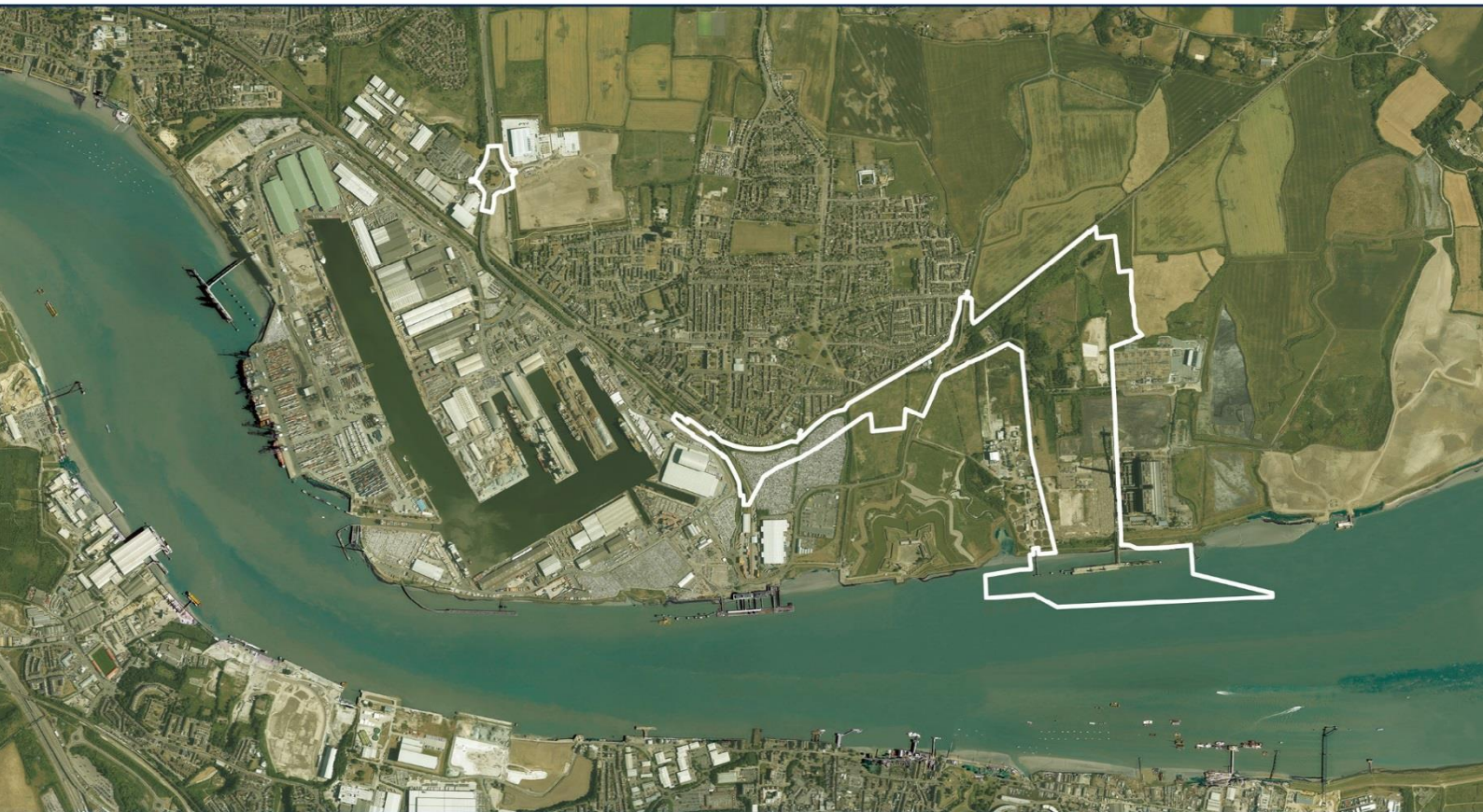
TILBURY2

TR030003

VOLUME 6

ES APPENDIX 2.A SECRETARY OF STATE SCOPING OPINION

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The Planning Inspectorate
Yr Arolygiaeth Gynllunio

SCOPING OPINION

Proposed Tilbury2

Planning Inspectorate Reference: TR030003

May 2017

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	3
1 INTRODUCTION.....	5
BACKGROUND.....	5
THE SECRETARY OF STATE'S CONSULTATION	6
STRUCTURE OF THE DOCUMENT.....	7
2 THE PROPOSED DEVELOPMENT	1
INTRODUCTION.....	1
THE APPLICANT'S INFORMATION	1
THE SECRETARY OF STATE'S COMMENTS	6
3 EIA APPROACH AND TOPIC AREAS	13
INTRODUCTION.....	13
EU DIRECTIVE 2014/52/EU.....	13
NATIONAL POLICY STATEMENTS (NPS)	13
ENVIRONMENTAL STATEMENT APPROACH	14
ENVIRONMENTAL STATEMENT STRUCTURE.....	17
MATTERS TO BE SCOPED OUT	18
TOPIC AREAS	20
4 OTHER INFORMATION	
APPENDIX 1 – PRESENTATION OF THE ENVIRONMENTAL STATEMENT	
APPENDIX 2 – LIST OF CONSULTATION BODIES FORMALLY CONSULTED	
APPENDIX 3 – RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES	

EXECUTIVE SUMMARY

This is the Scoping Opinion (the Opinion) provided by the Secretary of State (SoS) in respect of the content of the Environmental Statement (ES) for the proposed Tilbury2, Thurrock, Essex.

This report sets out the SoS's Opinion on the basis of the information provided in the Port of Tilbury London Limited's report entitled 'Proposed Port Terminal at Former Tilbury Power Station, Tilbury2, Regulation 8(1) Scoping Report' (March 2017) (the Scoping Report). The Opinion can only reflect the proposals as currently described by the Applicant.

The SoS has consulted on the Scoping Report and the responses received have been taken into account in adopting this Opinion. The SoS is satisfied that the topic areas identified in the Scoping Report encompass those matters identified in Schedule 4, Part 1, Paragraph 19 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) (the EIA Regulations).

The SoS draws attention both to the general points and those made in respect of each of the specialist topic areas in this Opinion. The main potential issues identified are:

- socio-economics;
- land-side transportation;
- marine navigation;
- marine ecology;
- noise and vibration during both construction and operation; and
- the setting of Tilbury Fort.

Matters are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the SoS.

The SoS notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitats Regulations).

1 INTRODUCTION

Background

- 1.1 On 27 March 2017, the SoS received the Scoping Report submitted by the Port of Tilbury London Limited (the Applicant) under Regulation 8 of the EIA Regulations in order to request a Scoping Opinion for the proposed Tilbury2 (the Proposed Development). This Opinion is made in response to this request and should be read in conjunction with the Applicant's Scoping Report.
- 1.2 The Applicant has formally provided notification under Regulation 6(1)(b) of the EIA Regulations that it proposes to provide an ES in respect of the Proposed Development. Therefore, in accordance with Regulation 4(2)(a) of the EIA Regulations, the Proposed Development is determined to be EIA development.
- 1.3 The EIA Regulations enable an Applicant, before making an application for an order granting development consent, to ask the SoS to state in writing its formal opinion (a Scoping Opinion) on the information to be provided in the ES.
- 1.4 Before adopting a Scoping Opinion the SoS must take into account:
- *the specific characteristics of the particular development;*
 - *the specific characteristics of development of the type concerned; and*
 - *the environmental features likely to be affected by the development.*
- (EIA Regulation 8 (9))*
- 1.5 This Opinion sets out what information the SoS considers should be included in the ES for the Proposed Development. The Opinion has taken account of:
- the EIA Regulations;
 - the nature and scale of the Proposed Development;
 - the nature of the receiving environment; and
 - current best practice in the preparation of an ES.
- 1.6 The SoS has also taken account of the responses received from the statutory consultees (see Appendix 3 of this Opinion). The matters addressed by the Applicant 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 SoS will take account of relevant legislation and guidelines (as appropriate). The SoS will not be precluded from requiring additional information, if it is considered necessary in

connection with the ES submitted with that application, when considering the Proposed Development for a Development Consent Order (DCO).

- 1.7 This Opinion should not be construed as implying that the SoS agrees with the information or comments provided by the Applicant in their request for an opinion from the SoS. In particular, comments from the SoS in this Opinion are without prejudice to any decision taken by the SoS (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), Associated Development, or development that does not require development consent.
- 1.8 Regulation 8(3) of the EIA Regulations states that a request for a Scoping Opinion must include:
- *a plan sufficient to identify the land;*
 - *a brief description of the nature and purpose of the development and of its possible effects on the environment;*
and
 - *such other information or representations as the person making the request may wish to provide or make.*
- 1.9 The SoS considers that this has been provided in the Applicant's Scoping Report.

The Secretary of State's Consultation

- 1.10 The SoS has a duty under Regulation 8(6) of the EIA Regulations to consult widely before adopting a Scoping Opinion. A full list of the Consultation Bodies is provided at Appendix 2. The Applicant should note that whilst the SoS's list can inform their consultation, it should not be relied upon for that purpose.
- 1.11 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 at Appendix 3, along with copies of their comments to which the Applicant should refer in undertaking the EIA.
- 1.12 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.
- 1.13 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 our website. The Applicant should also give due consideration to those comments in carrying out the EIA.

Structure of the Document

1.14 This Opinion is structured as follows:

- **Section 1:** Introduction
- **Section 2:** The Proposed Development
- **Section 3:** EIA approach and topic areas
- **Section 4:** Other information.

1.15 This Opinion is accompanied by the following Appendices:

- **Appendix 1:** Presentation of the ES
- **Appendix 2:** List of Consultation Bodies formally consulted
- **Appendix 3:** Respondents to consultation and copies of replies.

2 THE PROPOSED DEVELOPMENT

Introduction

- 2.1 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.

The Applicant's Information

Description of the Proposed Development

- 2.2 The Proposed Development is a port terminal with associated infrastructure including rail and road facilities, as well as revisions to the existing marine infrastructure. The main uses would be a Roll-on/Roll-off (Ro-Ro) terminal and a Construction Materials and Aggregates Terminal (CMAT) for stockpiling of construction materials and some processing of materials for the production of asphalt and concrete products.
- 2.3 The Proposed Development would likely include, but is not limited to, the following works:
- creation of hard surfaced pavements;
 - removal of the existing Anglian Water jetty;
 - improvement of and extensions to the existing jetty including Ro-Ro and aggregate berths;
 - dredging of berth pockets around the proposed and extended jetty and their approaches;
 - new and improved conveyors;
 - erection of welfare buildings;
 - erection of a single 10,000sq.m. warehouse;
 - a number of storage and production structures associated with the CMAT;
 - the construction of a new link road from Ferry Road to Fort Road;
 - formation of a rail spur and sidings;
 - highway improvements at the roundabout to the north of the Port (the 'ASDA roundabout'); and
 - temporary and permanent diversion of public footpaths.

- 2.4 The proposed layout of the site is shown in the general arrangement plans of the Scoping Report (Drawings 5153187-ATK-ZZ-XX-DR-ZZ-1000/P4 and 5153187-ATK-ZZ-XX-DR-ZZ-1001/P4).

Description of the application site

- 2.5 The application site is located on the north side of the River Thames within the Borough of Thurrock, south Essex, as shown on Drawing 5153187-ATK-ZZ-ZZ-SK-ZZ-001/P4 Location Plan of the Scoping Report.

- 2.6 In describing the application site, the Scoping Report has made the distinction between the 'Tilbury2 Site' and 'the Access Corridor'.

Tilbury2 site

- 2.7 The Tilbury2 site is divided by an access road which runs east-west, known as 'Substation Road'. To the south of this road, the site comprises land formerly accommodated by Tilbury A Power Station, coal storage, ancillary buildings and the former Tilbury Energy and Environment Centre (TEEC). Paragraph 5.21 of the Scoping Report states that the site is being cleared by the previous owners, RWE, and that the Applicant will obtain vacant possession on 30 March 2017. All buildings and operational structures associated with the Tilbury A Power Station will have been removed with the exception of:

- main gate house;
- club house building;
- sewage pump house;
- junction towers and conveyor; and
- jetty workshop.

- 2.8 Parts of the northern area were formerly used to manufacture 'Lytag' blocks as a by-product of fuel ash from the power station.

- 2.9 Ground investigations indicate that there is asbestos, hydrocarbon contamination, perched water and deeper groundwater at the site, likely to be attributable to the operation of the former power station.

- 2.10 There is land to the north of Substation Road that is used for the open storage of new motor vehicles. The remainder of this land is largely brownfield with areas of plantation woodland and developing scrub and some areas of relic grazing marsh.

- 2.11 Habitat types present on the site include unimproved neutral grassland, lowland dry acid grassland (including representations of 'lichen heath'), coastal and flood plain grazing marsh, reedbeds, ponds, hedgerows and lowland mixed deciduous woodland.

- 2.12 A number of drainage channels pass across the site and along its boundaries.
- 2.13 The Tilbury2 site has a frontage of 290m to the River Thames which includes an area of inter-tidal habitat. A deep water jetty, previously used for the importation of coal and a jetty previously used by Anglian Water are located within the marine area.

The access corridor and the ASDA roundabout

- 2.14 The proposed access corridor is a narrow length of land extending broadly west of the Tilbury2 site over partly vegetated land located immediately south of the existing railway and the southern margins of Tilbury Town.
- 2.15 Historically, the access corridor has been used as gas works, railway sidings and an engine shed.
- 2.16 At its western end, the access corridor encompasses part of the A1089/ Ferry Road which provides access to the Riverside Rail Terminal and the London Cruise Terminal. It also includes land occupied by an existing rail siding and operational land used by the Port for external storage (presently for imported new cars), and a narrow corridor of landscaping between this and the railway itself.
- 2.17 At the eastern end of the access corridor, the land includes part of Fort Road and an existing bridge where Fort Road crosses the railway at elevation.
- 2.18 Between these two developed areas there is an area of grazing land typically used for the grazing of horses.
- 2.19 The ASDA roundabout is located along the A1089 to the north west of the main application site.

Description of the surrounding area

- 2.20 To the east, the application site is bounded in part by agricultural land, in part by the Tilbury 400kv substation, and in part by the remainder of the Tilbury B Power Station complex which is in the process of being demolished.
- 2.21 To the west, the site is bounded by the Anglian Water Sewage Works, beyond which lies Tilbury Fort, a scheduled ancient monument and tourist attraction.
- 2.22 Beyond Tilbury Fort, lies the existing Port of Tilbury which encompasses a land area of approximately 445ha. It comprises waterside facilities, external storage, warehousing, industrial uses, and ancillary offices. The Riverside Rail Terminal and the London Cruise Terminal are located within Tilbury Port. The Fortress

Distribution Park, an area of port related car storage and HGV haulier parks, is located to the east of the existing Port of Tilbury.

- 2.23 London Distribution Park is situated to the north of the existing Tilbury Port and provides port-centric warehousing and an area of haulier parking; part of which is still under construction.
- 2.24 The town of Tilbury is located to the north of the application site and is predominantly residential with a commercial and retail centre. The town is separated from the application site by the Tilbury Loop of the Fenchurch Street to Southend Railway.
- 2.25 On the southern side of the River Thames is the town of Gravesend, where there is presently a plan for a theme park and entertainment resort.
- 2.26 Within 3km of the Proposed Development there are the following four designated nature conservation sites:
- Thames Estuary & Marshes Ramsar Site (1.3 km South East);
 - Thames Estuary & Marshes Special Protection Area (SPA) (1.3 km South East);
 - South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI) (1.3 km South East); and
 - Mucking Flats and Marshes SSSI (1.8km East).

Alternatives

- 2.27 The Applicant briefly discusses alternatives to the Proposed Development at section 5 of the Scoping Report. This explains that the application site is the closest available land to the existing port operational area that can be utilised to allow for increased berthing capacity and throughput. The application site has deep water frontage to the River Thames and is not constrained by existing residential development or the Tilbury Fort.
- 2.28 The Scoping Report states that a full analysis of the alternatives to the project and the route of the access corridor will form part of the ES.

Proposed access

- 2.29 The site is currently accessed from Fort Road and has a former rail connection point to the north which was last used in the 1960s. However, as noted above, the Proposed Development includes an access corridor to provide new road and rail provision from the A1089/ Ferry Road. The A1089/ Ferry Road, routes north from the existing Port of Tilbury, via a roundabout adjoining the ASDA supermarket and London Distribution Park, to the A13, and thence to the M25 and the national motorway network.

2.30 The routing of the new accesses within the application site are shown on the Applicant's Scoping Report general arrangement plans and explained below:

- Road access would comprise a new public highway from the existing A1089/ Ferry Road, along an alignment which closely follows the existing railway line to the Tilbury2 site. An improved road bridge would be constructed where Fort Road presently crosses the railway at the eastern end of the access corridor. Road accesses would also be created within the Tilbury2 site.
- Rail provision would be established by a connection from the existing Port of Tilbury sidings. The rail siding would route to the north of the proposed new highway until the Fort Road rail bridge, after which it would route around the northern and down the eastern boundary of the Tilbury2 site, terminating in new sidings near the jetty.

Construction

2.31 The Scoping Report contains limited detail on the construction activities, methods and timescales. However, it is noted that piling would be required for the jetty works.

Operation and maintenance

2.32 The Ro-Ro terminal would operate 363 days per year, 24 hours a day and would accommodate two vessel movements per day. The maximum capacity of the terminal is considered to be 500,000 units (trailers or containers) per annum; however, the likely throughput is 360,000 units per annum.

2.33 The CMAT would operate 312 days per year, 7am - 7pm Monday to Friday and 7am – 12pm Saturdays. The proposed capacity of the CMAT is 1,600,000 tonnes per annum:

- 700,000 tonnes transported away from the site by rail - some 1 – 3 trains per day;
- 750,000 tonnes by road - 50% exported on 16T vehicles and 50% on 33T vehicles; and
- circa 150,000 tonnes of material per annum by barge.

2.34 Some maintenance dredging of the berthing pockets and the immediately adjoining approach would be required.

Decommissioning

2.35 Decommissioning of the Proposed Development has not been considered in the Scoping Report.

The Secretary of State's Comments

Description of the Proposed Development

- 2.36 The Applicant should ensure that the description of the Proposed Development that is being applied for is as accurate and firm as possible as this will form the basis of the EIA. It is understood that at this stage in the evolution of the scheme the description of the proposals and even the location of the site may not be confirmed. The Applicant should be aware however, that the description of the Proposed Development in the ES must be sufficiently certain to meet the requirements of Paragraph 17 of Schedule 4 Part 1 of the EIA Regulations and there should therefore be more certainty by the time the ES is submitted with the DCO.
- 2.37 If a draft DCO is to be submitted, the Applicant should clearly define what elements of the Proposed Development are integral to the NSIP and which is 'Associated Development' under the Planning Act 2008 (as amended) (PA2008) or is an ancillary matter. Associated Development is defined in the PA2008 as development which is associated with the principal development. Guidance on Associated Development can be found in the Department of Communities and Local Government (DCLG) publication 'Planning Act 2008: Guidance on associated development applications for major infrastructure projects'.
- 2.38 Any proposed works and/or infrastructure required as Associated Development, or as an ancillary matter, (whether on or off-site) should be assessed as part of an integrated approach to environmental assessment.
- 2.39 The ES should include a clear description of all aspects of the Proposed Development, at the construction, operation and decommissioning stages. The ES should identify:
- land use requirements, including the area of the offshore elements;
 - site preparation;
 - construction processes and methods
 - transport routes;
 - operational requirements including the main characteristics of the production process and the nature and quantity of materials used, as well as waste arisings and their disposal;
 - maintenance activities including any potential environmental or navigation impacts; and
 - emissions - water, air and soil pollution, noise, vibration, light, heat, radiation.

- 2.40 The project description within the Scoping Report sets out a number of structures that would form part of the Proposed Development. The SoS would expect the ES to establish parameters for all which accord with what the DCO would allow for.
- 2.41 Paragraph 5.32 of the Scoping Report confirms that no landside cranes are proposed and that containers would be moved by reach stackers. The ES should provide details of the maximum height of stacked containers.
- 2.42 The SoS agrees with the comments of the Marine Management Organisation (MMO) regarding the necessary detail of the proposed jetty/marine works.
- 2.43 Table 5.1 of the Scoping Report explains that material recovered from demolition of the main gate house and clubhouse would be crushed and reused on site. The SoS has interpreted this to be as part of the DCO works, as opposed to being demolished in advance by RWE. However, the SoS found this description confusing. The application should clearly explain all of the works required and these should be assessed within the ES.
- 2.44 The ES should identify where the sewage pump house would be relocated to and the works that would be involved.
- 2.45 The SoS considers it would be helpful for the terminology used within the text to correspond to that used within figures. For example, the CMAT is referred to a number of times within the Scoping Report; however, its extent is not shown on any figures. Similarly, the elements of the CMAT that are listed in paragraph 5.33 of the Scoping Report do not appear on the general arrangement plans. It would be useful for the ES to contain figures depicting the locations of all elements of the proposal (i.e. those detailed in paragraphs 5.25 to 5.36 of the Scoping Report). The ES should also detail the dimensions of the elements, including elevations and any flexibility that is sought (i.e. limits of deviation).
- 2.46 Both capital and maintenance dredging is proposed. The ES should delineate the areas that would be dredged and identify the likely quantities of material that would be dredged, along with the frequencies of these activities. Paragraph 7.96 of the Scoping Report states that the fate of the dredged material is yet to be determined (either re-use within the Proposed Development or disposal at sea). The SoS expects this to be resolved by the time an application is made and that the resultant activities are taken into account within the assessment (e.g. vessel movements).
- 2.47 Paragraph 7.39 of the Scoping Report refers to river defences within the Order Limits. The ES should identify the locations of these features and detail whether any works are required to them and, if so, the potential effects of these works. Any potential impacts from

the Proposed Development on the river defences should be considered and assessed within the ES.

- 2.48 The Scoping Report makes reference to the potential need for works at the ASDA roundabout, however, no details have been provided at this stage. The project description within the ES should detail the works that will take place at this location, with plans where relevant. As these works are remote from the main site, the Applicant should ensure that it is made clear throughout all assessment chapters how the ASDA roundabout works have been considered.

Description of the application site and surrounding area

- 2.49 In addition to detailed baseline information to be provided within topic specific chapters of the ES, the SoS would expect the ES to include a section that summarises the site and surroundings. This would identify the context of the Proposed Development, any relevant designations and sensitive receptors. This section should identify land that could be directly or indirectly affected by the Proposed Development and any associated auxiliary facilities, landscaping areas and potential off site mitigation or compensation schemes.
- 2.50 As noted above, in describing the application site, the Scoping Report has made the distinction between the 'Tilbury2 Site' and 'the Access Corridor'. If this terminology is to be used within the ES, it would be useful for the ES to contain a plan clearly delineating the two areas. Although not explicitly stated within the Scoping Report, for the purposes of this Scoping Opinion the SoS has assumed the Tilbury2 site comprises the marine area and the land extending northwards, up to the proposed mixed use storage area adjacent to Fort Road rail bridge on Drawing 5153187-ATK-ZZ-XX-DR-ZZ-1000/P4. For the purposes of this Opinion, the SoS has assumed the Access Corridor comprises the area extending west from the Fort Road rail bridge (including the works at the ASDA roundabout).
- 2.51 The Order Limits delineated on the general arrangement plans of the Scoping Report include some 'empty' areas i.e. areas without any development taking place. The ES should explain the need for any such areas, for example if they are to be used as construction compounds.
- 2.52 Section 4 of the Scoping Report provides details of the existing Port of Tilbury and makes references to the surrounding land uses. In describing the surrounding area of the application site, it would be easier for readers to understand the context of the Tilbury2 site if the ES detailed the surrounding area with reference to the application site rather than from the Port of Tilbury (i.e. to explain the distance/direction of surroundings from the Tilbury2 site).
- 2.53 Paragraph 5.7 of the Scoping Report notes that additional areas may be included within the Order Limits as a result of changes to the

highway, public rights of way network in the vicinity of the works, construction compounds/corridors and environmental mitigation areas. Any such land should be clearly identified within the ES and any impacts associated should be assessed.

- 2.54 It would be useful for the overall land take of the application site to be provided within the ES.
- 2.55 The figures within the Scoping Report are primarily related to the ecology chapters. The use of figures to depict the baseline environment would be beneficial for all technical chapters of the ES.

Flexibility

- 2.56 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. At the time of application, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes. The scheme parameters will need to be clearly defined in the draft DCO and therefore 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 requirements of Paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.
- 2.57 Where the details of the scheme cannot be precisely defined, the EIA should assess the likely worst case. The Applicant's attention is drawn to Advice Note nine 'Using the 'Rochdale Envelope' which is available on our website and to the 'Flexibility' section in Appendix 1 of this Opinion which provides additional details on the recommended approach.
- 2.58 It should be noted that if the Proposed Development changes substantially during the EIA process, prior to application submission, the Applicant may wish to consider the need to request a new Scoping Opinion.

Permitted Development rights

- 2.59 The Scoping Report explains that the existing Port of Tilbury is a statutory undertaker which benefits from permitted development rights under the Town and Country Planning (permitted Development) Order 2015 (the GDPO) and the Applicant, as part of the DCO, will seek to ensure that such rights will apply equally to Tilbury 2 when that land becomes operational port land. The Scoping Report confirms that the exact nature of use at the port may change over time, therefore, as well as the development which is proposed to be authorised through the DCO, the EIA will be undertaken using a

Rochdale Envelope of port uses and development within operational land. The Scoping Report states that the ES will set out physical attributes (e.g. maximum scale) and the level of activity (e.g. traffic) that may be expected in the future.

- 2.60 Following on from the points above the Applicant's scoping response states that the EIA will include sensitivity testing e.g. for differing heights, masses, densities, uses and layouts within the constraints of the masterplan, with controls developed to ensure that the assessed envelope cannot be exceeded by exercise of DCO powers or permitted development rights.
- 2.61 The ES must define and assess all works which will be applied for within the draft DCO including any flexibility that is sought. The SoS does not consider that the Applicant's intended approach towards permitted development rights has been clearly presented in the Scoping Report. However, if the DCO applied for by the Applicant in effect enables the application of permitted development rights, which would not otherwise apply by virtue of the GDPO, these must be assessed and reported within the ES.
- 2.62 The Applicant's response to the scoping consultation confirms that the EIA will be undertaken adopting the parameters of the masterplan. However, the Scoping Report does not provide sufficient detail to allow for further comment as to the 'masterplan' approach. The SoS considers that this, and any flexibility sought, should be clearly explained and appropriately assessed within the ES.

Proposed access

- 2.63 The SoS notes the Proposed Development includes the permanent provision of an access corridor. The ES should detail these works, including the dimensions of the permanent proposed road bridge and the construction techniques necessary to construct it should be provided within the ES.
- 2.64 The ES should also explain how the site would be accessed during the construction phase and identify whether any temporary access roads are required.

Alternatives

- 2.65 The EIA Regulations require that the Applicant provide 'An outline of the main alternatives studied by the Applicant and an indication of the main reasons for the Applicant's choice, taking into account the environmental effects' (see Appendix 1).
- 2.66 The SoS notes the constraints detailed within the Scoping Report which have resulted in the choice of the application site. The ES should set out any environmental considerations that have been

taken into account in the development of the Proposed Development, for example in the final design and layout.

- 2.67 The Scoping Report states that the option of upgrading highway infrastructure along Fort Road is unsuitable for engineering and environmental reasons; where these have been considered by the Applicant, they should be detailed within the ES.

Construction

- 2.68 Limited information has been provided in the Scoping Report regarding the construction phase of the Proposed Development. Whilst it is appreciated that this information may not be available at this stage in the evolution of the Proposed Development, this information will be required. The SoS considers that the following information on construction should be clearly indicated in the ES:

- construction programme, including phasing;
- construction hours, including confirmation of whether night time working is required;
- site preparation;
- construction methods and activities associated with each phase including the plant and equipment to be used;
- size and location of construction compounds;
- lighting equipment/ requirements; and
- number, movements and parking of construction vehicles (both HGVs and staff).

- 2.69 Paragraph 7.227 of the Scoping Report refers to piling for the new Ro-Ro berth. Details of the piling, including the number and sizes of piles, should be provided within the ES.

- 2.70 The SoS notes the existing rail and river links in the vicinity of the Proposed Development and recommends that consideration is given to the delivery of construction materials using these modes of transport. This should be discussed within the ES.

Operation and maintenance

- 2.71 There are limited details within the Scoping Report on the operation of the CMAT. The ES should explain the operational requirements of this, including the main characteristics of the production process and the nature and quantity of materials used, as well as waste arisings and their disposal. The ES should include details of the processing required for the production of asphalt and concrete products that would take place during the operational stage; the volumes of material that would be processed should be provided.

2.72 Information on the operation and maintenance of the Port should be included in the ES and should cover but not be limited to such matters as:

- the number of full/ part-time jobs;
- the operational hours and if appropriate, shift patterns;
- the number and types of vehicle, vessel and rail movements generated during the operational stage; and
- maintenance activities including any potential environmental or navigation impacts.

Decommissioning

2.73 In terms of decommissioning, the SoS acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long term assessment is to enable the decommissioning of the works to be taken into account in the design and use of materials such that structures can be taken down with the minimum of disruption. The process and methods of decommissioning should be considered and options presented in the ES. The SoS encourages consideration of such matters in the ES.

3 EIA APPROACH AND TOPIC AREAS

Introduction

- 3.1 This section contains the SoS's specific comments on the approach to the ES and topic areas as set out in the Scoping Report. General advice on the presentation of an ES is provided at Appendix 1 of this Opinion and should be read in conjunction with this Section.

EU Directive 2014/52/EU

- 3.2 The SoS draws the Applicant's attention to European Union (EU) Directive 2014/52/EU (amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment) which was made in April 2014.
- 3.3 Under the terms of the 2014/52/EU Directive, Member States are required to bring into force the laws, regulations and administrative provisions necessary to comply with directive by 16 May 2017.
- 3.4 The Applicant's Scoping Report acknowledges that the proposed Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 are currently under consultation. The SoS notes that The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 have now been made and will be coming into force on 16th May 2017. The Applicant should be aware that these Regulations include for revocation and transitional provision relevant to the current Regulations.
- 3.5 On 23 June 2016, the UK held a referendum and voted to leave the European Union (EU). There is no immediate change to infrastructure legislation or policy. Relevant EU directives have been transposed in to UK law and those are unchanged until amended by Parliament.

National Policy Statements (NPS)

- 3.6 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 recommendations to the SoS and include the Government's objectives for the development of NSIPs.
- 3.7 The relevant NPS for Ports sets out assessment principles that should be considered in the EIA. When undertaking the EIA, the Applicant must have regard to the Ports NPS and identify how principles these have been assessed in the ES.
- 3.8 The SoS must have regard to any matter that the SoS thinks is important and relevant to the SoS's decision. This could include the draft NPS if the relevant NPS has not been formally designated.

Environmental Statement Approach

- 3.9 The information provided in the Scoping Report sets out the proposed approach to the preparation of the ES. Whilst early engagement on the scope of the ES is to be welcomed, the SoS notes that the level of information provided at this stage is not always sufficient to allow for detailed comments from either the SoS or the consultees.
- 3.10 The SoS would suggest that the Applicant ensures that appropriate consultation is undertaken with the relevant consultees in order to agree wherever possible the timing and relevance of survey work as well as the methodologies to be used. The SoS notes and welcomes the intention to finalise the scope of investigations in conjunction with ongoing stakeholder liaison and consultation with the relevant regulatory authorities and their advisors.
- 3.11 Paragraph 7.3 of the Scoping Report states that *“Appropriate study areas will be considered for each environmental topic by the specialist(s) undertaking that assessment”*. This is welcomed by the SoS; however, detail within the Scoping Report of specific study areas is limited. The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.
- 3.12 The ES should not be a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the Proposed Development. This is particularly important when considering impacts in terms of any permutations or parameters to the Proposed Development.
- 3.13 The SoS recommends that in order to assist the decision making process, the Applicant may wish to consider the use of tables:
- to identify and collate the residual effects (those after mitigation) on the basis of specialist topics, inter-relationships and cumulative impacts;
 - to demonstrate how the assessment has taken account of this Opinion and other responses to consultation;
 - to set out the mitigation measures proposed, as well as assisting the reader, the SoS considers that this would also enable the Applicant to cross refer mitigation to specific provisions proposed to be included within the draft DCO; and

- to cross reference where details in the Habitats Regulations Assessment (HRA) (where one is provided) such as descriptions of sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

EIA methodology

- 3.14 Paragraph 6.7 of the Scoping Report states that impact significance will be considered on a four point scale (major, moderate, minor and negligible). The SoS would expect the EIA Methodology chapter of the ES to define an overarching methodology which will be used to determine these significance levels. The ES should clearly distinguish between what are considered to be the significant and non-significant effects. Any deviation from the overarching methodology for technical assessments should be clearly set out within the relevant chapters.
- 3.15 The Scoping Report explains that the EIA will be undertaken on the basis that all structures associated with the old Tilbury A Power Station will have been removed from the application site, with the exception of those identified in Table 5.1 of the Scoping Report. The SoS notes that site clearance was due to be completed by the end of March 2017, however also notes that some surveys were undertaken before this date (e.g. noise and ecology). The ES should therefore explain whether this would have had any bearing on the baseline that is presented.
- 3.16 Paragraph 6.9 of the Scoping Report explains that the remainder of the former Tilbury B power station to the east of the application site is likely to be demolished by RWE, but will remain standing whilst the environmental assessment is undertaken. The SoS assumes that the three year demolition programme referred to in paragraph 7.44 of the Scoping Report therefore relates to Tilbury B power station; however, this is not clearly explained. The Scoping Report therefore proposes that two baseline scenarios will be provided within the ES: one with and one without the existence of Tilbury B power station. The Applicant states this will only be relevant in some cases, e.g. for the landscape and visual and heritage assessments; for other environmental topics, the continued existence of the power station or its complete demolition will make no difference to the assessment of environmental effects. The SoS notes this approach and understands the practical difficulties it presents to the assessment process. However, the SoS considers that it is important for the assessment to address the certainty that can be attached to the proposed demolition activities at Tilbury B power station. This information will enable the SoS to understand the extent to which the assessment can rely on the delivery of demolition activities at Tilbury B.
- 3.17 The SoS also notes that there is the potential for cumulative effects should demolition of the power station take place concurrently

alongside construction of the Proposed Development. This should be taken into consideration within the ES.

- 3.18 The Scoping Reports states that the maximum capacity of the terminal is considered to be 500,000 units (trailers or containers) per annum; however, the likely throughput is 360,000 units per annum. The assessments presented within the ES should be undertaken on a worst case basis which identifies the maximum potential number of vessel/road/traffic movements, including any barge transport associated with the CMAT.
- 3.19 The SoS notes the Ro-Ro terminal would operate 24 hours per day. The ES should take into account the impacts of 24 hour working within all assessments.

Mitigation

- 3.20 The Scoping Report makes reference to both primary measures which would form part of the iterative design process, and secondary measures designed to address adverse effects. There is limited detail on specific mitigation measures throughout the Scoping Report; however, the SoS acknowledges that these will be developed as the EIA progresses.
- 3.21 Mitigation measures should be agreed with the relevant consultees, clearly set out within the ES and appropriately secured within the DCO or via other suitable methods. The SoS expects to be able to understand the effectiveness of mitigation measures and will need to be satisfied that they are adequately and appropriately secured.
- 3.22 The Applicant should clearly describe the primary mitigation that is embedded and how it is proposed to be secured within the design and presented within the DCO application. There should be a clear distinction between mitigation that is proposed in response to effects identified in the EIA and that which is inbuilt / inherent in the design. In the case of the latter, the SoS will expect to understand how the embedded mitigation has been considered within the EIA.

Cumulative assessment

- 3.23 The SoS welcomes the proposed consideration of cumulative impacts and notes the schemes to be considered that have been identified to date in paragraph 7.4 of the Scoping Report. The Applicant's intention to develop a final list of projects with regard to Advice note 9 is welcomed; however the Applicant's attention is also drawn to Advice note 17: Cumulative effects assessment which deals specifically with cumulative effects. The Applicant's intention to consider any proposals on the land to the east of the application site, should they emerge, is also welcomed.

- 3.24 The SoS advises the Applicant to agree the plans or projects to be considered with the relevant local authorities.
- 3.25 The SoS recommends the ES contains details of the plans or projects considered within the cumulative assessment, such as the anticipated construction and operational parameters, along with a figure identifying their locations.
- 3.26 Paragraph 7.6 of the Scoping Report explains that the ES will not consider the Lower Thames Crossing (LTC) in the cumulative assessment as there is no certainty as to the route and impact on the highway network in the vicinity of the Port, and as Tilbury2 does not rely on the delivery of the LTC. The Applicant states it is not reasonable to prepare an alternative Traffic Impact Assessment. The SoS notes the LTC preferred route announced on 12 April 2017 will be in close proximity to the Tilbury2 port and considers that potential cumulative effects of the two projects should be assessed. The SoS notes that this view is shared by Thurrock Borough Council.
- 3.27 The SoS notes the Applicants comments regarding the need for additional Traffic Impact Assessment. The SoS notes that the level of assessment is possible is relevant to the information that is available. The SoS advises the Applicant (in determining the approach to the assessment) to consider the advice contained in the Planning Inspectorate's Advice note 17. The SoS also notes that consideration of cumulative effects of the two projects should not be limited to just transport implications without full justification.
- 3.28 Limited consideration has been given to the assessment of cumulative effects within each topic chapter. The SoS would expect the cumulative effects assessment to consider all potential environmental impacts.

Environmental Statement Structure

- 3.29 Paragraph 6.3 of the Scoping Report sets out the proposed structure of the ES and notes that it is anticipated that the ES will be produced in three volumes:
- Volume 1: Main Text including drawings and images;
 - Volume 2: Appendices; and
 - Volume 3: Non-technical summary.
- 3.30 The environmental topics on which the Applicant has sought the opinion of the SoS are:
- Socio-economics;
 - Health and wellbeing;
 - Landscape character and visual amenity;

- Terrestrial ecology;
- Marine ecology;
- Archaeology and cultural heritage;
- Land-side transportation;
- Marine navigation;
- Hydrogeology and ground conditions;
- Water Resources including flood risk;
- Water Framework Directive Assessment;
- Noise and vibration;
- Air quality;
- Waste and materials; and
- Public rights of way.

3.31 The SoS welcomes the proposal to structure each environmental topic on a consistent basis as proposed in paragraph 6.5 of the Scoping Report. The SoS notes the proposal to assess effects of the development and primary mitigation in subsection (vi), but would also expect residual effects to be assessed, i.e. those post the application of additional mitigation referred to in subsection (vii).

3.32 The SoS refers the Applicant to paragraph 5.8.4 of the Ports NPS which states that "*The applicant should assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement.*" The SoS advises that consideration is given to all of these potential effects within the ES.

Matters to be scoped out

3.33 The Scoping Report proposed to scope out the matters detailed below.

3.34 *Marine Ecology* – Paragraph 7.98 of the Scoping Report proposes to scope out impacts to commercially harvested shellfish due to the 25km distance from the development to the aquaculture production areas at Southend. The SoS assumes that dredged arisings will not be disposed of in proximity to the aquaculture production. On this basis, the SoS agrees that given this distance, significant effects are unlikely and therefore this topic can be scoped out of the EIA.

3.35 *Hydrogeology and ground conditions* - Paragraph 7.202 of the Scoping Report proposes to scope out the following:

- The physical impacts of the development – the site is brownfield land and the Scoping Report explains that changes in topography, soil compaction and soil erosion, and ground stability issues

associated with the ground abnormalities related to the former use of the site will be addressed through the iterative design in its response to the EIA process and that this will be discussed with the Environment Agency. On the basis that discussions with the Environment Agency are still ongoing on this matter, the SoS does not agree it can be scoped out at this stage.

- Impacts on geology as a valuable resource – the Scoping Report states there are no recorded statutory geological sites or regionally important geological sites on or adjacent to the site. The SoS notes that the Globe Pit SSSI, designated for its geological interest, is located more than 3km from the application site and therefore agrees that impacts on statutory geological sites can be scoped out. However, the SoS considers that the proposal to scope out impacts on geology as a valuable resource is inconsistent with the applicant's proposal to assess the potential effects of construction and operation on the Seaford Chalk Formation and Newhaven Chalk Formation and alluvium deposits. On this basis, the SoS does not agree to scope out impacts on geology as a valuable resource.
- Impacts on soils as a natural resource – due to the former use of the site, the Applicant considers this is not relevant. The SoS agrees this can be scoped out of the EIA.
- Implications of soil/ material quality for re-use – this is stated to be discussed within the 'Use of natural resources and Waste' section, however the SoS has not been able to find any relevant information within the Scoping Report. As such, the SoS does not agree this can be scoped out of the EIA.

3.36 *Air Quality*

- Plant emissions during construction phase - paragraph 7.325 of the Scoping Report states that plant would be used e.g. for dredging, piling, excavation, creation of hard surfaces and the road and rail link. Limits on plant emissions would be set and contractors would be required to meet them; and plant would be used on a short-term operational nature. The SoS agrees that it is unlikely there would be any significant effects on air quality from construction plant emissions during the construction phase and that this can be scoped out. However, the ES should explain how limits on plant emissions would be secured and recommends this may be best addressed through preparation and implementation of a construction environmental management plan.
- Operational fugitive dust - the Scoping Report contains what is termed a 'rapid assessment' which notes that receptors would be 'distant' and concludes that dust can be controlled and impacts can be mitigated; therefore additional assessment is not required at EIA stage. Given the current level of detail regarding the operational management of bulk materials, and the potential for significant effects, the SoS does not agree that this can be scoped

out of the EIA. In particular, the SoS notes that the 'rapid assessment' relies upon mitigation which at this stage does not appear to be well developed or clearly defined.

- Operational rail and shipping emissions – the Scoping Report concludes that railway and shipping emissions are unlikely to be significant as the LAQM.TG(16) screening criteria would not be met. The Applicant states these conclusions will be reviewed during the EIA. The SoS agrees that on the basis of this information, no further assessment is necessary; however welcomes that it will be kept under review. The ES should also set out any measures taken to minimise the local effect of emissions (see Ports NPS paragraph 4.12.4).

3.37 In order to demonstrate that topics have not simply been overlooked, where topics are scoped out prior to submission of the DCO application, the ES should still explain the reasoning and justify the approach taken.

3.38 Matters are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the SoS. Whilst the SoS has not agreed to scope out certain topic or matters within this Opinion on the basis of the information available at the time, this does not prevent the Applicant from subsequently agreeing with the relevant consultees to scope matters out of the ES, where further evidence has been provided to justify this approach. This approach should be explained fully in the ES.

Topic Areas

Socio-economics

3.39 The assessment should consider all relevant socio-economic impacts and the Applicant's attention is drawn to the requirements of Section 5.14 of the Ports NPS in this regard.

3.40 The Scoping Report explains that an economic impact assessment of the existing Port was undertaken in May 2016 and the Applicant proposes to update this (using a predominantly desk based approach) to cover construction and operation of the Proposed Development. The SoS considers that the socio-economic assessment for the Proposed Development should be independent from the assessment previously conducted for the existing Port of Tilbury. Where it is considered that baseline data collected to support the socio-economic assessment of the existing Port of Tilbury is transferrable to that of the Proposed Development, this should be clearly justified. Notwithstanding this, the cumulative socio-economic effects of the existing Port of Tilbury and the Proposed Development should be considered.

3.41 The Scoping Report does not set out the proposed approach to the assessment of significance for socio-economic effects. Recognised

guidance should be adopted, where available, and significance criteria should be clearly set out in the submitted ES. The assessment should consider the potential significance of the impacts of the proposal within the local and regional context.

- 3.42 The assessment should include a breakdown of the likely jobs and roles created by the Proposed Development, at both the construction and operational stages. This should be considered in the context of the available workforce in the area. Any proposed mitigation measures should be identified, such as skills and training programmes that would promote local employment. This should include consideration of the potential to create apprenticeship opportunities during construction and operation. The socio-economic assessment and in particular any skills and training opportunities should be developed in discussion with the relevant local authorities.
- 3.43 Paragraph 7.21 of the Scoping Report indicates that impacts on recreational users of the river and the land around the site will be considered in the ES and the SoS welcomes this. This should include the Gravesend Sailing and Rowing Clubs and annual regattas, as noted in Gravesend Borough Council's consultation response. The potential impacts on tourism (for example, the cruise terminal and the Tilbury Fort scheduled monument) should also be assessed.
- 3.44 Any potential impacts on local businesses both inside and outside of the Port (for example, impacts arising from road/rail/river closures) should be described and assessed in the ES. This should include commercial users of the river (such as the Gravesend-Tilbury Ferry and ship repair facilities). The Applicant's attention is drawn to the consultation responses from the Port of London Authority and the MMO, which state that the potential impacts on the commercial fishing industry should be considered in the ES. Medway Council's response states that potential impacts on London Thamesport should be considered.
- 3.45 The socio-economic assessment should be cross-referenced to other topic chapters as relevant (for example the visual impact of the development may affect recreational users/tourism).

Health and wellbeing

- 3.46 The SoS does not consider it to be appropriate to comment on the need or otherwise for a Health and Wellbeing Assessment as this is not a requirement under the EIA Regulations. The Applicant is referred to comments on Health in Part 4 of this Opinion.

Landscape character and visual amenity

- 3.47 The SoS welcomes the Applicant's intention to undertake the assessment in accordance with Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3).

- 3.48 The Scoping Report refers to the identification of a Zone of Theoretical Visibility (ZTV). The ES should describe the model used, provide information on the area covered and the timing of any survey work and the methodology used to inform the ZTV.
- 3.49 The Scoping Report also refers to the predicted Zone of Significant Visibility (ZSV) which is defined as where 'development is likely to draw the eye of the casual observer'. The SoS is unfamiliar with the term 'ZSV', which is not a term used in GLVIA3, and it is unclear how it will be established. This should be clarified within the ES and the methodology used should be clearly described. It should be clear within the ES how the ZSV is used to help inform the selection of visual receptors.
- 3.50 The SoS welcomes that the location and sensitivity of visual receptors will be agreed with the local authorities; this should include viewpoints for the assessment. The ES should contain baseline photographs from the viewpoints, which should be informed by a site visit. Consideration should be given to receptors on both the north and south banks of the River Thames.
- 3.51 The Proposed Development would take place within previously developed or disturbed land and in the immediate context of a water treatment works and the former Tilbury B Power Station. As such, the Scoping Report states that *"in this context the sensitivity of landscape and visual receptors will be significantly lower in many instances"*. The SoS notes that GLVIA3 allows for the sensitivity of a receptor to be defined according to the susceptibility of the receptor to change/development and the value related to that receptor. The SoS reminds the Applicant of its commitment to agree the sensitivity of receptors with the local authorities. Any approach which allows for the sensitivity of a receptor to be adjusted, reflecting the susceptibility to change, should be explained and appropriately justified within the ES.
- 3.52 Paragraph 7.61 of the Scoping Report refers to 'a combination of objective and subjective judgements'. Subjective judgements should be identified, explained and justified within the ES.
- 3.53 The Applicant has not proposed to produce any photomontages as part of the assessment, but the SoS considers that these would be a useful aid to the assessment. In this regard, the Applicant's attention is drawn to the comments of Historic England with regard to the need to prepare photomontages and/or wirescape images from heritage viewpoints. The SoS also notes Thurrock Borough Council's comments which suggests the inclusion of a representative viewpoint for Coalhouse Fort.
- 3.54 Paragraph 5.30 of the Scoping Report makes reference to column mounted and high mast luminaires. The SoS therefore expects the ES to provide details of the proposed lighting and an assessment of potential light impacts, with relevant cross reference made to the

ecological assessments. The SoS suggests a detailed lighting strategy is provided.

- 3.55 The SoS welcomes the preparation of a landscape strategy and advises that this is discussed and agreed with the local authority.
- 3.56 Careful consideration should be given to the form, siting, and use of materials and colours in terms of minimising the adverse visual impact of these structures.

Marine ecology

- 3.57 It is difficult to discern the boundaries of the Thames Estuary & Marshes Ramsar site and SPA on Figure 7.1. The SoS recommends that large scale figures with higher resolution are used within the ES. It would also be useful for the extent of the Thames Estuary recommended Marine Conservation Zone (rMCZ) to be visually depicted.
- 3.58 The Scoping Report considers that existing data will be sufficient to define the baseline environment for fish, plankton and marine mammals and no additional surveys would be required. The MMO has agreed in its consultation response that an extensive amount of survey data is available for fish ecology, however the SoS notes the comments of the Port of London Authority regarding the need to utilise local and more up to date survey material for marine mammals. The Applicant should agree the need for surveys with the relevant bodies including the Environment Agency, Natural England and the MMO (and their advisors, Cefas).
- 3.59 Similarly, the need for additional benthic ecology surveys should be agreed. The SoS notes the comments of the MMO regarding the need for greater confidence in the notion that the tentacle lagoon worm is not present and Natural England's comments that it may be useful to assume presence of the species if presence cannot be scoped out due to salinity and environmental conditions.
- 3.60 In accordance with the Ports NPS, the SoS advises that consideration should be given to the potential risk of the introduction of non-native species from ships' ballast water.
- 3.61 The SoS notes that underwater noise is considered within the Noise and Vibration chapter of the Scoping Report. The ES should assess the potential for injury and effects on behaviour of both fish and marine mammal. Appropriate cross reference should be made between the noise and vibration chapter and the marine ecology chapter.
- 3.62 The Scoping Report proposes to assess disturbance of marine mammals and fish resulting from night time working lights during

construction. Consideration should also be given to disturbance during the operational phase.

- 3.63 The Scoping Report does not identify any specific guidance that will be used to undertake the assessment, but states that significance will be based on magnitude and receptor sensitivity. The SoS reminds the Applicant to ensure that the methodology is clearly explained within the ES.
- 3.64 The SoS welcomes the consultation undertaken to date and that proposed with the MMO, Environment Agency and Natural England.
- 3.65 The Applicant's attention is drawn to the comments of the MMO, the Port of London Authority and Natural England with regard to the need to assess the potential impacts on the Thames Estuary rMCZ.

Terrestrial ecology

- 3.66 Paragraph 7.106 of the Scoping Report identifies four statutory designated ecological sites within a 3km study area. In addition to these sites, Natural England's consultation response notes that Hangman's Wood and Deneholes SSSI is located in proximity to the Proposed Development; the ES should consider the effects on this SSSI.
- 3.67 Paragraph 7.110 identifies three Local Wildlife Sites (LWS) located within the site boundary, although it is unclear what study area was used to identify LWSs. It is noted that Figure 1.3 of the Scoping Report only depicts the location of two of the LWSs. The SoS recommends the locations of all identified LWSs are illustrated on a plan. Natural England does not hold information on locally designated sites and so the relevant local authorities and the local wildlife trusts should be consulted to confirm if these LWSs may be affected by the Proposed Development.
- 3.68 The study areas for statutory the ecological assessment should be discussed and agreed with Natural England and the relevant local authorities and be clearly defined and justified in the ES.
- 3.69 Paragraphs 2.33 and 7.107 of the Scoping Report state that the distances between the application site and the identified statutory sites rule out significant effects from "*many sources associated with the project (e.g. dust), impossible or unlikely*". The SoS recommends that the scope of potential impacts on SSSIs should be discussed and agreed with Natural England as the relevant statutory nature conservation body.
- 3.70 The Scoping Report has identified some species-specific guidance for undertaking survey work. However, it is unclear what overarching guidance would be followed when undertaking the ecological assessment. Appropriate guidance (including species-specific

guidance) should be selected and referenced in the ES, e.g. the Guidelines for Ecological Impact Assessment developed by the Chartered Institute of Ecology and Environmental Management (CIEEM). The Applicant should ensure that any guidance used is up to date and relevant for the purposes of the assessment.

- 3.71 Paragraph 7.112 of the Scoping Report explains that an extended Phase 1 habitat survey of the main site and surface access corridor was completed in 2016. It is not stated whether a Phase 1 survey of the ASDA roundabout has been completed. The need for this should be discussed and agreed with Natural England/ the relevant local authorities.
- 3.72 It is noted from Figure 1b (Habitat Map – Surface Access Corridor) of the Scoping Report that some areas are marked as ‘not accessible for survey’. The reasons for this have not been explained within the Scoping Report, although paragraph 7.137 of the Scoping Report states that further survey work of the surface access corridor is proposed. The Applicant is advised to ensure as full survey coverage as possible, and to discuss with Natural England and the relevant local authorities their approach to the assessment including survey coverage.
- 3.73 The red line on Figure 1b is stated to represent the habitat ‘survey area’. However, there is no background mapping on the figure and as such it is not possible to ascertain which part of the development it relates to. The Applicant should ensure all figures within the ES are clearly legible and easy to understand. The SoS also recommends that the DCO order limits are included on the figures for ease of reference.
- 3.74 The Scoping Report explains that the ecological surveys undertaken to date have identified a number of protected species, with further surveys planned. Paragraph 7.138 of the Scoping Report states that the study areas for the ecological surveys have extended outside the order limits ‘where it has been considered appropriate to do so...’, the reasons for which should be explained in the ES. The Applicant is advised to discuss and agree the methodology, study areas and timings of the further ecological surveys with the relevant local authorities and Natural England. In this regard, the Applicant’s attention is drawn to Natural England’s consultation response, which advises that Phase 2 surveys (or equivalent) should be undertaken. In addition, Natural England has adopted standing advice for protected species which includes links to guidance on survey and mitigation. The Applicant’s attention is drawn to the advice regarding European Protected Species in Section 4 of this Opinion.
- 3.75 The Applicant’s attention is drawn to the Environment Agency’s consultation response, which advises that surveys for invasive species and any necessary eradication measures should be undertaken.

- 3.76 The Scoping Report notes that ecological data has been obtained from the Essex Wildlife Trust Biological Records Centre. The SoS advises the Applicant also considers consulting the Kent Biological Records Centre to obtain data for the area south of the River Thames.
- 3.77 Details of how fish populations are to be impacted and whether eel passage through the ditch network may be affected should be considered in the ES. This should also be considered as part of the Water Framework Directive (WFD) assessment.
- 3.78 The SoS recommends that the effects of shadowing and light pollution on light-sensitive species should be assessed in the ES. This should be cross-referenced with the landscape and visual assessment as appropriate.
- 3.79 The Applicant's attention is drawn to the Environment Agency's consultation response, which explains that water vole populations from the ditches and Pincocks Trough will require translocation to receptor sites. This will need to be discussed and agreed with Natural England and the Environment Agency.
- 3.80 In accordance with paragraph 5.1.19 of the Ports NPS, the Applicant should demonstrate how the Proposed Development would enhance existing habitats and, where practicable, create new habitats of value within the site landscaping proposals. Paragraph 7.152 of the Scoping Report explains that there is limited scope for on-site habitat compensation. The SoS notes the Applicant's intention to secure off-site habitat compensation prior to the submission of the DCO application, working in consultation with the Essex Wildlife Trust. The SoS notes that the Applicant will need to ensure that any such habitat is appropriately and demonstrably secured to provide confidence to the overall delivery of such measures. The SoS recommends that Natural England, the Environment Agency and the relevant local authorities are also consulted in this regard. The Applicant's attention is drawn to the Environment Agency's scoping consultation response, which provides recommendations in relation to habitat compensation.
- 3.81 The SoS notes that the ecological figures in Appendix 2 of the Scoping Report were produced by White Young Green for RWE nPower. The SoS would expect ES figures to be prepared specifically for the Proposed Development.
- 3.82 The ES should cross refer to the other technical assessments (such as air quality and noise) as necessary. The SoS recommends the need to consider cumulative impacts and advises this is particularly relevant in terms of assessing the impacts on ecology.

Archaeology and cultural heritage

- 3.83 It is unclear why the study area has been defined in paragraph 7.153 of the Scoping Report as 2km, but the terrestrial archaeological desk

based assessment is stated to only consider data 1.25km from the application site. The Applicant is advised to agree the study area with Historic England and the local authority and implement this consistently throughout the assessment.

- 3.84 The ES should depict the locations of boreholes, test pit and site investigation used to prepare the Deposit Model. The Applicant's attention is also drawn to the comments of Historic England relating to the Deposit Model and the need to fully understand archaeological potential.
- 3.85 The Scoping Report states that the marine archaeological baseline will need to be established and states this would be done through a walkover survey of the foreshore and intertidal zones, along with a review of data. The SoS queries how this walkover will cover the spatial area to be disturbed during construction and advises that the approach to establishing the baseline in the marine environment is discussed further with Historic England. The Applicant's attention is drawn to the comments of Historic England with regard to the marine archaeology.
- 3.86 The Scoping Report refers to a number of different guidance documents and states the Built Heritage Statement will be prepared in accordance with these. Whilst the SoS would expect all assessment methodology to be clearly set out within the ES, this will be particularly important where numerous guidelines are used, so that readers can understand how the assessment has been undertaken. The Applicant's attention is drawn to the comments of Historic England which recommends the analysis of impacts on setting is undertaken following the staged approach set out in the Good Practice Advice in Planning 3: The Setting of Heritage Assets.
- 3.87 The SoS notes the concerns raised by Historic England in relation to the provision of tables/matrices to identified the magnitude of effect against the sensitivity of a receptor. The Applicant is advised to agree a methodology with Historic England which addresses their concerns.
- 3.88 Paragraph 7.164 of the Scoping Report states that the Proposed Development is unlikely to have a significant effect on the below ground internationally important palaeoenvironmental deposits. It is unclear if the Applicant is proposing to scope this out of the EIA; however, the SoS notes there is no justification for doing so and therefore recommends that the potential for impacts is given further consideration within the EIA. The Applicant's attention is also drawn to the comments of Historic England in this regard.
- 3.89 The Applicant may wish to consider the use of representative visualisations to explain the impacts on setting of Tilbury Port.
- 3.90 Consideration should be given to potential for impacts on the setting of designated heritage assets on the southern shore of the River

Thames (see comments of Historic England and Gravesham Borough Council in Appendix 3 of this Opinion).

- 3.91 The Applicant should demonstrate how, in accordance with the Ports NPS, access to and the condition of heritage assets would be maintained and improved, where necessary.

Land-side transportation

- 3.92 The Scoping Report does not explain how the baseline would be established. This approach should be agreed with relevant consultees and documented within the ES.
- 3.93 The Scoping Report states that a Transport Assessment (TA) will support the EIA and assess the operational impacts of the development. The scope of the TA has not been provided; however, the SoS advises that in accordance with the Ports NPS, WebTAG methodology is used. The SoS welcomes that the scope will be agreed with Highways England, Thurrock Council and Essex County Council. Discussions should include agreement of the study area, which has not been defined within the Scoping Report.
- 3.94 The TA should clearly set out how traffic movements have been predicted and what models and assumptions have been used to inform the assessment. The number of heavy good vehicle movements should be provided separately to the estimates of other traffic movements. The SoS considers that a worst case scenario should be presented and justified within the ES to take account of the maximum number of movements that could arise from the Proposed Development.
- 3.95 The assessment should be based on the proposed operating hours of the port facility and include movements generated by port employees.
- 3.96 The Scoping Report states that the environmental impact of the traffic associated with the proposals would be assessed in accordance with the Institute of Environmental Assessment's publication "Guidelines for the Environmental Assessment of Road Traffic" (GEART). The SoS notes that GEART is appropriate for the assessment of effects to existing transport infrastructure from a proposed development. Given the Proposed Development includes the provision of new road and rail infrastructure and improvements to existing roads, the SoS recommends that the assessment also takes account of suitable alternative guidance for assessing the impacts of any new road development, for example the Design Manual for Roads and Bridges (DMRB).
- 3.97 In addition to the potential effects of road traffic resulting from the operation of the proposed port, the ES should explain the implications of the proposed alterations at the ASDA roundabout.

- 3.98 The ES should identify the potential receptors considered within the assessment. This should include not only drivers, but other road users including cyclists and pedestrians.
- 3.99 Paragraph 7.180 of the Scoping Report implies that an assessment of effects of rail movements on existing rail infrastructure would not be undertaken. This is on the basis that *“Disruption during construction will be minimised as no new signalling or out turn from the existing main line will be required. Movements will be toward London and will therefore not impact on delay at any level crossing to the east of the site.”* The SoS advises the Applicant to liaise with Network Rail in this regard, and if necessary assess any effects.
- 3.100 The ES should identify mitigation measures that are proposed to be implemented during both the construction and operational phase including demand management measures. The SoS recommends that draft versions of a construction traffic management plan and an operational travel plan are submitted with the DCO application.

Marine navigation

- 3.101 The SoS notes that a Navigational Risk Assessment (NRA) will be produced and submitted to the Port of London Authority. It is assumed that the NRA will therefore form the basis of the marine navigation chapter of the ES.
- 3.102 The Scoping Report identifies the potential for impacts to occur during the construction period but does not provide any further details as to what these may be. It is therefore welcomed that these will be discussed further with the Port of London Authority. The proposed discussions with Trinity House are also welcomed.
- 3.103 To inform the assessment, information on the number and size of the vessels likely to be utilising the Proposed Development should be provided in the ES. The ES should assess a worst case scenario and the assessment should also reflect the proposed operating hours of the Proposed Development. It is understood that movements from the Proposed Development could be either up or down stream, depending on the commercial agreements and resulting occupants. It is also noted that these may change over the operational lifespan of the Proposed Development. However, it should be clear within the ES what assumptions have been made in undertaking the assessment.
- 3.104 The NRA should identify the requirements for aids to navigation during construction and operation.
- 3.105 Paragraph 7.191 of the Scoping Report states that the Proposed Development would not impact on the operation of the Tilbury to Gravesend Ferry as neither the physical infrastructure nor vessel movements will infringe on the route of the ferry. No evidence has been provided to justify this statement and the SoS notes the

comments of Gravesham Borough Council that the ferry could be affected by vessel movements and that benefits could arise from additional demand. This should be considered further and if necessary assessed within the ES.

Hydrogeology and ground conditions

- 3.106 The baseline for the ES should explain in detail the extent of the study area and justify the reasons for this.
- 3.107 The approach to classifying significant effects is set out in Table 7.6 of the Scoping Report. It is unclear how this relates to Table 7.4 (value/sensitivity of receptor) and Table 7.5 (magnitude of effect); these are typically used within EIA to provide a framework for establishing the significance of effects. The methodology applied within the assessment should be clarified within the ES.
- 3.108 The Scoping Report states that the ES will consider the effects of construction and operation on the Seaford Chalk Formation and Newhaven Chalk Formation and alluvium deposits; however no details are provided as to how the assessment will be undertaken. The SoS refers to its comments made above in this Opinion regarding scoping out impacts on geology as a valuable resource and advises that the assessment scope and methodology is agreed with the Environment Agency.
- 3.109 The ES should detail the construction method chosen to protect groundwater and provide details of the 'good site working practices' and relevant guidance referred to within the Scoping Report.
- 3.110 The Applicant's attention is drawn to the comments of the Environment Agency, in particular with regard to the value of receptors and to the need to consider the impact of potential mobilisation of groundwater contaminated with leachate from nearby landfill sites.

Water resources including flood risk

- 3.111 The SoS notes the proposed 1km study area proposed for establishing the baseline. The SoS recommends this study area is agreed with the Environment Agency and the Lead Local Flood Authority.
- 3.112 The SoS welcomes the provision of a Flood Risk Assessment (FRA) and the proposed consultation with the Environment Agency and the Lead Local Flood Authority. The FRA should encompass both the main application site and the access corridor. It should form an appendix to the ES and should take into account the most recent climate change projections (see <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>).

- 3.113 The FRA and the ES should assess the potential impacts on the existing flood defences, in particular the effects resulting from changes to the hydrodynamic and sedimentary regime. The Applicant should ensure that in accordance with the Ports NPS, it has a restoration plan for areas of foreshore disturbed by direct works and pre- and post-construction coastal monitoring arrangements with defined triggers for intervention and restoration. The assessment should address the efficacy of any such plan. The Applicant's attention is drawn to the comments of the Environment Agency in relation to flood defence assets, the FRA and the TE2100 plan.
- 3.114 Paragraph 7.221 of the Scoping Report refers to *"new gravity outfalls through the existing [flood] defences into the River Thames"*. The ES should identify the locations of these outfalls. Their height comparative to the mean high water springs and their flow rates should be provided to inform the assessment taking into account the longer term effects from climate change.
- 3.115 The SoS would expect details of surface drainage for the development to be provided. The Scoping Report proposes the use of SUDs features; the ES should provide details of these features and identify their locations. Appropriate cross-reference should be made to other assessments in relation to these features e.g. the landscape and visual assessment and ecological assessment.
- 3.116 The ES should identify whether water abstraction is necessary for either the construction or operational phase, and if so provide the abstraction rates.
- 3.117 The SoS notes the proposed use of the calibrated Thames Base model (which is established by the Environment Agency and Port of London Authority) to model hydrodynamics and sedimentation. It is unclear from the Scoping Report whether any baseline studies are required to determine existing hydrodynamics and sediment levels, or whether this information is obtained solely from the model. This should be discussed with the EA and local authorities and clarified within the ES. Any necessary surveys should be clearly reported.
- 3.118 The Scoping Report notes the potential for the Proposed Development to change erosion or accretion in the marine area; however, does not specifically propose to assess such changes. The SoS considers this should be quantified within the ES and the potential effects of any changes considered. The methodology for undertaking this work should be agreed with the Environment Agency.
- 3.119 The Scoping Report states that significance will be based on assessing the impact magnitude and the sensitivity of the receptor; however, no further details have been provided. Definitions of levels of magnitude and sensitivity should be provided within the ES and they should be clearly applied throughout the assessment.

- 3.120 Consideration should be given to the potential for impacts on the southern side of the River Thames (see the comments of Gravesham Borough Council in Appendix 3 of this Opinion) and Tilbury Fort (see comments of Historic England in Appendix 3 of this Opinion).
- 3.121 The ES should consider the potential for cumulative effects arising from dredging for the Proposed Development and London Gateway Port (see the comments of the Environment Agency).

Water Framework Directive (WFD) assessment

- 3.122 Except for where the WFD assessment overlaps with the Water Resources and Flood Risk and Hydrogeology and Ground Conditions chapters of the ES, a WFD assessment is a separate process from the EIA. The SoS therefore does not consider it appropriate to comment on the proposed WFD assessment approach. However, the Applicant's attention is drawn to the comments of the Environment Agency regarding the WFD assessment and to section 4 of this Opinion.

Noise and vibration

- 3.123 The Scoping Report has not set out a proposed study area for the assessment; this should be identified and justified within the ES. The SoS advises that in addition to assessing impacts on receptors in the immediate vicinity of the Proposed Development, consideration is given to receptors on the southern side of the River Thames.
- 3.124 The SoS welcomes that liaison has taken place with the Environmental Health Department of Thurrock Council to agree the assessment methodology and monitoring locations. The intention to undertake additional baseline noise monitoring is noted. The ES should provide details of all monitoring undertaken and clearly identify the locations used.
- 3.125 The SoS notes that demolition and clearance has been taking place on the site and will be ongoing at Tilbury B power station to the east of the site until circa January 2019; the ES should detail whether any of these activities were taking place at the time of the baseline noise surveys. Ideally, the Applicant should ensure that the baseline noise surveys are representative of the conditions at the site without such activities taking place. The potential impacts of concurrent activities occurring (e.g. construction of Tilbury2 alongside the demolition of Tilbury B power station) should be considered in the cumulative assessment.
- 3.126 The SoS welcomes the proposal to establish underwater noise levels using an underwater noise survey and to discuss the monitoring location with the MMO.
- 3.127 The models used for predicting noise and vibration levels, both on land and in the marine environment, should be identified within the

ES. The input parameters for the models should be clearly set out and should assess a worst case scenario that would be permitted through the DCO for example hours of construction, types of plant, number and size of piles, vehicle movements.

- 3.128 Paragraph 7.265 identifies three different guidance documents to be used for assessing the impact of rail noise. The SoS reiterates its previous comments made regarding the use of numerous guidance documents and the need to clearly set out the assessment methodology within the ES. Noting the guidance referred to, it will be particularly important for the ES to set out how significance in EIA terms will be established and for this methodology to be adhered to throughout the assessment.
- 3.129 The Scoping Report states that *"The noise impacts associated with vessel movements attributable to the Proposed Development will be determined on the basis of independently published source data information"*. No assessment methodology has been proposed and it is unclear as to what 'independently published source data information' would comprise. The SoS recommends this assessment methodology is discussed and agreed with the relevant consultees. The ES should set out the assumptions made in such an assessment, for example the type/size of vessels and vessel movement scheduling.
- 3.130 Noise impacts on people should be specifically assessed and particularly any potential noise disturbance at night and other unsocial hours such as weekends and public holidays.
- 3.131 Noise and vibration impacts along the foreshore potentially affecting birds and fish should be also be assessed.
- 3.132 The ES should show how good design and use of appropriate technologies will be implemented to help mitigate adverse noise effects.
- 3.133 Consideration should be given to monitoring noise complaints during construction and when the development is operational.

Air quality

- 3.134 Paragraph 7.365 of the Scoping Report states that additional baseline monitoring using NO₂ diffusion tubes would be undertaken if required; however, does not explain how it will be determined whether their use is required. The SoS recommends the use of diffusion tubes is discussed with the relevant local authorities and that, if required, their locations are agreed.
- 3.135 Figure 7.4 of the Scoping Report is of poor quality and is difficult to read; the Applicant should ensure that figures within the ES are of sufficient scale and quality to be fully understood.

- 3.136 The Applicant is advised to agree the sensitive receptors with the relevant local authorities.
- 3.137 Table 7.11 – Summary of operational dust emissions screening exercise, reference has been made to the receptor sensitivity, magnitude of effect and residual emissions, but no definitions have been provided. These should be provided within the ES.
- 3.138 The Scoping Report explains that road traffic emissions modelling will be undertaken, but has not explained how the results of these would be translated to significance in EIA terms. This should be clearly explained and applied within the ES. The ES should detail the models used in the air quality assessment and clearly set out the inputs and relevant assumptions that have been applied. The ES should detail any model verification that is undertaken and should identify the year that has been assessed. In terms of utilising traffic data as an input to the air quality model, the Applicant should ensure that it is consistent across the ES topics.
- 3.139 The Scoping Report notes that the need for a compliance risk assessment in accordance with IAN 175/13 will be determined through consultation with Highways England.
- 3.140 Paragraph 7.372 of the Scoping Report states that the need for dispersion modelling of small point sources will be confirmed once a more detailed design is available. The Scoping Report does not explain how this will be determined, nor does it propose any methodology of any such assessment. The SoS advises the Applicant to continue to engage with the relevant local authorities (and if applicable, the Environment Agency) in this regard and to agree the assessment scope if required. Where an assessment is undertaken, the implications of stack height and dispersion of the discharge needs to be clearly explained.
- 3.141 Air quality and dust levels should be considered not only on site but also off site, including along access roads, local footpaths and other public rights of way (PROW).
- 3.142 In accordance with the Ports NPS, the Applicant should demonstrate how the new port infrastructure has been designed to minimise emissions of greenhouse gases.
- 3.143 Consideration should be given to appropriate mitigation measures and to monitoring dust complaints.

Waste and materials

- 3.144 The SoS welcomes the proposed consideration of waste and materials within the ES and notes that the assessment criteria is based on Atkins' prior experience given there is no specific industry assessment standard.

- 3.145 The ES should consider the potential for waste arisings from the operation of the ready mix concrete batching plant and the asphalt batching plant.
- 3.146 The SoS notes the temporal scope stated in paragraph 7.387 of the Scoping Report to be 2017 – 2018 for construction and late 2018 for operation. The Applicant should ensure they revise these dates to correspond with potential dates of construction/operation that would result from the DCO regime.
- 3.147 With reference to Table 7.12 of the Scoping Report, the Applicant should take care to ensure that the criterion do not overlap with one another. For example minor significance is classified as ‘between 1 and 5% of...waste arisings’ and moderate significance is classified as ‘between 5 and 10% of...waste arisings’. Any such overlap in classifications should be avoided.
- 3.148 The ES will need to identify and describe the control processes and mitigation procedures for storing and transporting waste off site. All waste types should be quantified and classified.
- 3.149 The Applicant is encouraged to produce a Site Waste Management Plan to include information on the proposed waste recovery and disposal system for all waste generated by the development.

Public rights of way

- 3.150 The SoS welcomes that consideration will be given to potential impacts on PROW and that discussions will be held with the Thurrock Council’s PROW officer. However, the Scoping Report only proposes to identify existing rights of way and review problems/opportunities. The SoS is unclear why a separate chapter for PROWs has been proposed in the Scoping Report and considers that potential impacts on PROWs could be appropriately addressed elsewhere in the ES, e.g. landscape and visual impact, land-side transportation, air quality.

In doing so, any PROWs to be affected by the Proposed Development should be depicted on figures; showing both their existing routes and their temporary/permanent diversions. The duration of any temporary diversions should be detailed within the ES.

4 OTHER INFORMATION

- 4.1 This section does not form part of the SoS's Opinion as to the information to be provided in the ES. However, it does respond to other issues that the SoS has identified which may help to inform the preparation of the application for the DCO.

Pre-application Prospectus

- 4.2 The Planning Inspectorate offers a service for Applicants at the Pre-application stage of the NSIP process. Details are set out in the prospectus 'Pre-application service for NSIPs'¹. The prospectus explains what the Planning Inspectorate can offer during the Pre-application phase and what is expected in return. The Planning Inspectorate can provide advice about the merits of a scheme in respect of national policy; can review certain draft documents; as well as advice about procedural and other planning matters. Where necessary a facilitation role can be provided. The service is optional and free of charge.
- 4.3 The level of Pre-application support provided by the Planning Inspectorate will be agreed between an applicant and the Planning Inspectorate at the beginning of the Pre-application stage and will be kept under review.

Preliminary Environmental Information (PEI)

- 4.4 Consultation forms a crucial aspect of environmental impact assessment. As part of their Pre-application consultation duties, Applicants are required to prepare a Statement of Community Consultation (SoCC). This sets out how the local community will be consulted about the Proposed Development. The SoCC must state whether the Proposed Development is EIA development and if it is, how the Applicant intends to publicise and consult on PEI. Further information in respect of PEI may be found in Advice note seven 'Environmental Impact Assessment: Preliminary Environmental Information, Screening and Scoping'.

Habitats Regulations Assessment (HRA)

- 4.5 The SoS notes that European sites² could be potentially affected by the Proposed Development. The Habitats Regulations require

¹ The prospectus is available from:
<http://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

² The term 'European sites' in this context includes Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs), possible SACs, potential SPAs, Ramsar sites, proposed Ramsar sites, and any sites identified as compensatory measures for adverse effects on any of the

competent authorities, before granting consent for a plan or project, to carry out an appropriate assessment (AA) in circumstances where the plan or project is likely to have a significant effect on a European site (either alone or in combination with other plans or projects). Applicants should note that the competent authority in respect of NSIPs is the relevant SoS. It is the Applicant's responsibility to provide sufficient information to the competent authority to enable them to carry out an AA or determine whether an AA is required.

- 4.6 The Applicant should note that the Secretary of State for Transport will be the competent authority for the Habitats Regulations, not the Planning Inspectorate.
- 4.7 The Applicant's attention is drawn to Regulation 5(2)(g) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (the APFP Regulations) and the need to include with the DCO application a report identifying European sites to which the Habitats Regulations applies and Ramsar sites, which may be affected by the Proposed Development.
- 4.8 The report to be submitted under Regulation 5(2)(g) of the APFP Regulations with the application must deal with two issues: the first is to enable a formal assessment by the competent authority of whether there is a likely significant effect; and the second, should it be required, is to enable the carrying out of an AA by the competent authority.
- 4.9 The Applicant's attention is also drawn to UK Government policy³, which states that the following sites should be given the same protection as European sites: possible SACs (pSACs); potential SPAs (pSPAs); and (in England) proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on any of the above sites. Therefore, Applicants should also consider the need to provide information on such sites where they may be affected by the Proposed Development.
- 4.10 Further information on the HRA process is contained within Planning Inspectorate's Advice Note ten 'Habitat Regulations Assessment relevant to nationally significant infrastructure projects', available on our website. It is recommended that Applicants follow the advice contained within this advice note.

above. For a full description of the designations to which the Habitats Regulations apply, and/or are applied as a matter of Government policy, see the Planning Inspectorate's Advice Note ten

³ In England, the NPPF Paragraph 118. In Wales, TAN5 Paragraphs 5.2.2 and 5.2.3.

Plan To Agree Habitats Information

- 4.11 A Plan may be prepared to agree upfront what information in respect of Habitats Regulations the Applicant needs to supply to the Planning Inspectorate as part of a DCO application. This is termed an Evidence Plan for proposals in England or in both England and Wales, but a similar approach can be adopted for proposals only in Wales. For ease these are all termed 'evidence plans' here.
- 4.12 An evidence plan will help to ensure compliance with the Habitats Regulations. It will be particularly relevant to NSIPs where impacts may be complex, large amounts of evidence may be needed or there are a number of uncertainties. It will also help Applicants meet the requirement to provide sufficient information (as explained in Advice Note ten) in their application, so the ExA can recommend to the SoS whether or not to accept the application for Examination and whether an AA is required.
- 4.13 Any Applicant of a proposed NSIP can request an evidence plan. A request for an evidence plan should be made at the start of Pre-application (eg after notifying the Planning Inspectorate on an informal basis) by contacting Natural England (NE).

Sites of Special Scientific Interest (SSSIs)

- 4.14 The SoS notes that a number of SSSIs are located close to or within the Proposed Development. Where there may be potential impacts on the SSSIs, the SoS has duties under sections 28(G) and 28(I) of the Wildlife and Countryside Act 1981 (as amended) (the W&C Act). These are set out below for information.
- 4.15 Under s28(G), the SoS has a general duty '... to take reasonable steps, consistent with the proper exercise of the authority's functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest'.
- 4.16 Under s28(I), the SoS must notify the relevant nature conservation body (NCB), NE in this case, before authorising the carrying out of operations likely to damage the special interest features of a SSSI. Under these circumstances 28 days must elapse before deciding whether to grant consent, and the SoS must take account of any advice received from the NCB, including advice on attaching conditions to the consent. The NCB will be notified during the Examination period.
- 4.17 If Applicants consider it likely that notification may be necessary under s28(I), they are advised to resolve any issues with the NCB before the DCO application is submitted to the SoS. If, following assessment by applicants, it is considered that operations affecting the SSSI will not lead to damage of the special interest features,

applicants should make this clear in the ES. The application documents submitted in accordance with Regulation 5(2)(I) could also provide this information. Applicants should seek to agree with the NCB the DCO requirements which will provide protection for the SSSI before the DCO application is submitted.

European Protected Species (EPS)

- 4.18 Applicants should be aware that the decision maker under the PA2008 has, as the competent authority (CA), a duty to engage with the Habitats Directive. Where a potential risk to a European Protected Species (EPS) is identified, and before making a decision to grant development consent, the CA must, amongst other things, address the derogation tests in Regulation 53 of the Habitats Regulations. Therefore the Applicant may wish to provide information which will assist the decision maker to meet this duty.
- 4.19 If an Applicant has concluded that an EPS licence is required the ExA will need to understand whether there is any impediment to the licence being granted. The decision to apply for a licence or not will rest with the Applicant as the person responsible for commissioning the proposed activity by taking into account the advice of their consultant ecologist.
- 4.20 Applicants are encouraged to consult with NE and, where required, to agree appropriate requirements to secure necessary mitigation. It would assist the Examination if Applicants could provide, with the application documents, confirmation from NE whether any issues have been identified which would prevent the EPS licence being granted.
- 4.21 Generally, NE are unable to grant an EPS licence in respect of any development until all the necessary consents required have been secured in order to proceed. For NSIPs, NE will assess a draft licence application in order to ensure that all the relevant issues have been addressed. Within 30 working days of receipt, NE will either issue 'a letter of no impediment' stating that it is satisfied, insofar as it can make a judgement, that the proposals presented comply with the regulations or will issue a letter outlining why NE consider the proposals do not meet licensing requirements and what further information is required before a 'letter of no impediment' can be issued. The Applicant is responsible for ensuring draft licence applications are satisfactory for the purposes of informing formal Pre-application assessment by NE.
- 4.22 Ecological conditions on the site may change over time. It will be the Applicant's responsibility to ensure information is satisfactory for the purposes of informing the assessment of no detriment to the maintenance of favourable conservation status (FCS) of the population of EPS affected by the proposals. Applicants are advised that current conservation status of populations may or may not be

favourable. Demonstration of no detriment to favourable populations may require further survey and/or submission of revised short or long term mitigation or compensation proposals.

- 4.23 In England the focus concerns the provision of up to date survey information which is then made available to NE (along with any resulting amendments to the draft licence application). Applicants with projects in England (including activities undertaken landward of the mean low water mark) can find further information in Advice Note eleven, Annex C⁴.

Other Regulatory Regimes

- 4.24 The SoS recommends that the Applicant should state clearly what regulatory areas are addressed in the ES and that the Applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the Proposed Development which may be regulated by other statutory regimes have been properly taken into account in the ES.
- 4.25 It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA2008, the SoS will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The Applicant is encouraged to make early contact with other regulators. Information from the Applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not subsequently be granted, will be helpful in supporting an application for development consent to the SoS.

Water Framework Directive

- 4.26 EU Directive 2000/60/EC (the Water Framework Directive) establishes a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. Under the terms of the Directive, Member States are required to establish river basin districts and corresponding river basin management plans outlining how the environmental objectives outlined in Article 4 of the Directive are to be met.

⁴ Advice Note eleven, Annex C – Natural England and the Planning Inspectorate available from: http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf

- 4.27 In determining an application for a DCO, the Secretary of State must be satisfied that the applicant has had regard to relevant river basin management plans (RBMP) and that the Proposed Development is compliant with the terms of the Water Framework Directive and its daughter directives.
- 4.28 The Scoping Report has identified WFD water bodies but has not identified the relevant RBMP for the Proposed Development; however the Secretary of State notes that it is located within the Anglian River Basin District.
- 4.29 The Scoping Report states that construction will not be considered as part of the WFD assessment as it is assumed that best practice guidance will be followed to minimise potential impacts of the construction activities. The Applicant should identify what these measures are and demonstrate how they would be secured.
- 4.30 In this respect, the Applicant's attention is drawn to Regulation 5(2)(l) of the APFP Regulations which requires an application for an NSIP to be accompanied by, *'where applicable, a plan with accompanying information identifying-... ..(iii) water bodies in a river basin management plan, together with an assessment of any effects on such sites, features, habitats or bodies likely to be caused by the Proposed Development'*.

The Environmental Permitting Regulations and the Water Resources Act

Environmental Permitting Regulations 2010

- 4.31 The Environmental Permitting Regulations 2010 require operators of certain facilities, which could harm the environment or human health, to obtain permits from the Environment Agency (EA). Environmental permits can combine several activities into one permit. There are standard permits supported by 'rules' for straightforward situations and bespoke permits for complex situations. For further information, please see the Government's advice on determining the need for an environmental permit⁵.
- 4.32 The EA's environmental permits cover:
- industry regulation;
 - waste management (waste treatment, recovery or disposal operations);
 - discharges to surface water;
 - groundwater activities; and

⁵ Available from: <https://www.gov.uk/environmental-permit-check-if-you-need-one>

- radioactive substances activities.

4.33 Characteristics of environmental permits include:

- they are granted to operators (not to land);
- they can be revoked or varied by the EA;
- operators are subject to tests of competence;
- operators may apply to transfer environmental permits to another operator (subject to a test of competence); and
- conditions may be attached.

The Water Resources Act 1991

4.34 Under the Water Resources Act 1991 (as amended), anyone who wishes to abstract more than 20m³/day of water from a surface source such as a river or stream or an underground source, such as an aquifer, will normally require an abstraction licence from the EA. For example, an abstraction licence may be required to abstract water for use in cooling at a power station. An impoundment licence is usually needed to impede the flow of water, such as in the creation of a reservoir or dam, or construction of a fish pass.

4.35 Abstraction licences and impoundment licences are commonly referred to as 'water resources licences'. They are required to ensure that there is no detrimental impact on existing abstractors or the environment. For further information, please see the EA's WR176 guidance form on applying for a full, transfer or impounding licence⁶:

4.36 Characteristics of water resources licences include:

- they are granted to licence holders (not to land);
- they can be revoked or varied;
- they can be transferred to another licence holder; and
- in the case of abstraction licences, they are time limited.

Role of the Applicant

4.37 It is the responsibility of Applicants to identify whether an environmental permit and / or water resources licence is required from the EA before an NSIP can be constructed or operated. Failure to obtain the appropriate consent(s) is an offence.

4.38 The EA allocates a limited amount of Pre-application advice for environmental permits and water resources licences free of charge.

⁶ Available from: <https://www.gov.uk/government/publications/wr176-applying-for-full-transfer-or-impoundment-licence-form-guidance>

Further advice can be provided, but this will be subject to cost recovery.

- 4.39 The EA encourages Applicants to engage with them early in relation to the requirements of the application process. Where a project is complex or novel, or requires a HRA, Applicants are encouraged to “parallel track” their applications to the EA with their DCO applications to the Planning Inspectorate. Further information on the EA’s role in the infrastructure planning process is available in Annex D of the Planning Inspectorate’s Advice note eleven (working with public bodies in the infrastructure planning process)⁷
- 4.40 When considering the timetable to submit their applications, Applicants should bear in mind that the EA will not be in a position to provide a detailed view on the Proposed Development until it issues its draft decision for public consultation (for sites of high public interest) or its final decision. Therefore the Applicant should ideally submit its application sufficiently early so that the EA is at this point in the determination by the time the DCO reaches Examination.
- 4.41 It is also in the interests of an applicant to ensure that any specific requirements arising from their permit or licence are capable of being carried out under the works permitted by the DCO. Otherwise there is a risk that requirements could conflict with the works which have been authorised by the DCO (e.g. a stack of greater height than that authorised by the DCO could be required) and render the DCO impossible to implement.

Health and Wellbeing Assessment

- 4.42 The SoS notes that the Applicant intends to provide a Health and Wellbeing Assessment as part of the ES. The Applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from the Public Health England and Thurrock Borough Council.
- 4.43 The methodology for the Health and Wellbeing Assessment should be agreed with the relevant statutory consultees and take into account mitigation measures for acute risks.
- 4.44 The Applicant should have regard to Section 4.16 of the Ports NPS.

Transboundary Impacts

- 4.45 The SoS has noted that the Applicant has not indicated whether the Proposed Development is likely to have significant impacts on another European Economic Area (EEA) State.

⁷ Available from: <http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

- 4.46 Regulation 24 of the EIA Regulations, which inter alia require the SoS to publicise a DCO application if the SoS is of the view that the Proposed Development is likely to have significant effects on the environment of another EEA state and where relevant to consult with the EEA state affected. The SoS considers that where Regulation 24 applies, this is likely to have implications for the Examination of a DCO application.
- 4.47 The SoS recommends that the ES should identify whether the Proposed Development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

APPENDIX 1 – PRESENTATION OF THE ENVIRONMENTAL STATEMENT

A1.1 The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (SI 2264) (as amended) (APFP Regulations) sets out the information which must be provided for an application for a Development Consent Order (DCO for nationally significant infrastructure under the Planning Act 2008 (as amended) (PA2008). Where required, this includes an Environmental Statement (ES). Applicants may also provide any other documents considered necessary to support the application. Information which is not environmental information need not be replicated or included in the ES.

A1.2 An ES is described under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) as a statement:

- *that includes such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development and of any associated development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile; but that includes at least the information required in Part 2 of Schedule 4.*

(EIA Regulations, Regulation 2)

A1.3 The purpose of an ES is to ensure that the environmental effects of a Proposed Development are fully considered, together with the economic or social benefits of the development, before the development consent application under the PA2008 is determined. The ES should be an aid to decision making.

A1.4 The Secretary of State (SoS) advises that the ES should be laid out clearly with a minimum amount of technical terms and should provide a clear objective and realistic description of the likely significant impacts of the Proposed Development. The information should be presented so as to be comprehensible to the specialist and non-specialist alike. The SoS recommends that the ES be concise with technical information placed in appendices.

ES Indicative Contents

A1.5 The SoS emphasises that the ES should be a 'stand-alone' document in line with best practice and case law. Schedule 4, Parts 1 and 2 of the EIA Regulations set out the information for inclusion in ES.

A1.6 Schedule 4 Part 1 of the EIA Regulations states this information includes:

17. Description of the development, including in particular—

- a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;*
- a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;*
- an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc) resulting from the operation of the Proposed Development.*

18. An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.

19. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.

20. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:

- the existence of the development;*
- the use of natural resources;*

the emission of pollutants, the creation of nuisances and the elimination of waste,

and the description by the applicant of the forecasting methods used to assess the effects on the environment.

21. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

22. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.

23. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

(EIA Regulations, Schedule 4 Part 1)

The content of the ES must include as a minimum those matters set out in Schedule 4 Part 2 of the EIA Regulations. This includes the consideration of 'the main alternatives studied by the applicant' which the SoS recommends could be addressed as a separate chapter in the ES. Part 2 is included below for reference:

24. A description of the development comprising information on the site, design and size of the development

25. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects

26. The data required to identify and assess the main effects which the development is likely to have on the environment

27. An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects, and

28. A non-technical summary of the information provided [under the four Paragraphs of Schedule 4 part 2 above].

(EIA Regulations, Schedule 4 Part 2)

A1.7 Traffic and transport is not specified as a topic for assessment under Schedule 4; although in line with good practice the SoS considers it is an important consideration *per se*, as well as being the source of further impacts in terms of air quality and noise and vibration.

Balance

A1.8 The SoS recommends that the ES should be balanced, with matters which give rise to a greater number or more significant impacts being given greater prominence. Where few or no impacts are identified, the technical section may be much shorter, with greater use of information in appendices as appropriate.

The SoS considers that the ES should not be a series of disparate reports and stresses the importance of considering inter-relationships between factors and cumulative impacts.

Scheme Proposals

A1.9 The scheme parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES which should support the

application as described. The SoS is not able to entertain material changes to a project once an application is submitted. The SoS draws the attention of the Applicant to the DCLG and the Planning Inspectorate's published advice on the preparation of a draft DCO and accompanying application documents.

Flexibility

- A1.10 The SoS acknowledges that the Environmental Impact Assessment (EIA) process is iterative, and therefore the proposals may change and evolve. For example, there may be changes to the scheme design in response to consultation. Such changes should be addressed in the ES. However, at the time of the application for a DCO, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes.
- A1.11 It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to assess robustly 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 requirements of Paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.
- A1.12 The Rochdale Envelope principle (*see R v Rochdale MBC ex parte Tew (1999) and R v Rochdale MBC ex parte Milne (2000)*) is an accepted way of dealing with uncertainty in preparing development applications. The Applicant's attention is drawn to the Planning Inspectorate's Advice Note Nine 'Rochdale Envelope' which is available on our website.
- A1.13 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. Where some flexibility is sought and the precise details are not known, the Applicant should assess the maximum potential adverse impacts the Proposed Development could have to ensure that the Proposed Development, as it may be constructed, has been properly assessed.
- A1.14 The ES should be able to confirm that any changes to the development within any proposed parameters would not result in significant impacts not previously identified and assessed. The maximum and other dimensions of the Proposed Development should be clearly described in the ES, with appropriate justification. It will also be important to consider choice of materials, colour and the form of the structures and of any buildings. Lighting proposals should also be described.

Scope

- A1.15 The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be

sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and local authorities and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

Physical Scope

A1.16 In general the SoS recommends that the physical scope for the EIA should be determined in the light of:

- the nature of the proposal being considered;
- the relevance in terms of the specialist topic;
- the breadth of the topic;
- the physical extent of any surveys or the study area; and
- the potential significant impacts.

A1.17 The SoS recommends that the physical scope of the study areas should be identified for each of the environmental topics and should be sufficiently robust in order to undertake the assessment. This should include at least the whole of the application site, and include all offsite works. For certain topics, such as landscape and transport, the study area will need to be wider. The extent of the study areas should be on the basis of recognised professional guidance and best practice, whenever this is available, and determined by establishing the physical extent of the likely impacts. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given.

Breadth of the Topic Area

A1.18 The ES should explain the range of matters to be considered under each topic and this may respond partly to the type of project being considered. If the range considered is drawn narrowly then a justification for the approach should be provided.

Temporal Scope

A1.19 The assessment should consider:

- environmental impacts during construction works;
- environmental impacts on completion/ operation of the Proposed Development;
- where appropriate, environmental impacts a suitable number of years after completion of the Proposed Development (for

example, in order to allow for traffic growth or maturing of any landscape proposals); and

- environmental impacts during decommissioning.

A1.20 In terms of decommissioning, the SoS acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long term assessment, as well as to enable the decommissioning of the works to be taken into account, is to encourage early consideration as to how structures can be taken down. The purpose of this is to seek to minimise disruption, to re-use materials and to restore the site or put it to a suitable new use. The SoS encourages consideration of such matters in the ES.

A1.21 The SoS recommends that these matters should be set out clearly in the ES and that the suitable time period for the assessment should be agreed with the relevant statutory consultees.

A1.22 The SoS recommends that throughout the ES a standard terminology for time periods should be defined, such that for example, 'short term' always refers to the same period of time.

Baseline

A1.23 The SoS recommends that the baseline should describe the position from which the impacts of the Proposed Development are measured. The baseline should be chosen carefully and, whenever possible, be consistent between topics. The identification of a single baseline is to be welcomed in terms of the approach to the assessment, although it is recognised that this may not always be possible.

A1.24 The SoS recommends that the baseline environment should be clearly explained in the ES, including any dates of surveys, and care should be taken to ensure that all the baseline data remains relevant and up to date.

A1.25 For each of the environmental topics, the data source(s) for the baseline should be set out together with any survey work undertaken with the dates. The timing and scope of all surveys should be agreed with the relevant statutory bodies and appropriate consultees, wherever possible.

A1.26 The baseline situation and the Proposed Development should be described within the context of the site and any other proposals in the vicinity.

Identification of Impacts and Method Statement

Legislation and Guidelines

A1.27 In terms of the EIA methodology, the SoS recommends that reference should be made to best practice and any standards, guidelines and legislation that have been used to inform the assessment. This should include guidelines prepared by relevant professional bodies.

A1.28 In terms of other regulatory regimes, the SoS recommends that relevant legislation and all permit and licences required should be listed in the ES where relevant to each topic. This information should also be submitted with the application in accordance with the APFP Regulations.

A1.29 In terms of assessing the impacts, the ES should approach all relevant planning and environmental policy – local, regional and national (and where appropriate international) – in a consistent manner.

Assessment of Effects and Impact Significance

A1.30 The EIA Regulations require the identification of the '*likely significant effects of the development on the environment*' (Schedule 4 Part 1 Paragraph 20).

A1.31 As a matter of principle, the SoS applies the precautionary approach to follow the Court's reasoning in judging 'significant effects'. In other words 'likely to affect' will be taken as meaning that there is a probability or risk that the Proposed Development will have an effect, and not that a development will definitely have an effect.

A1.32 The SoS considers it is imperative for the ES to define the meaning of 'significant' in the context of each of the specialist topics and for significant impacts to be clearly identified. The SoS recommends that the criteria should be set out fully and that the ES should set out clearly the interpretation of 'significant' in terms of each of the EIA topics. Quantitative criteria should be used where available. The SoS considers that this should also apply to the consideration of cumulative impacts and impact inter-relationships.

A1.33 The SoS recognises that the way in which each element of the environment may be affected by the Proposed Development can be approached in a number of ways. However it considers that it would be helpful, in terms of ease of understanding and in terms of clarity of presentation, to consider the impact assessment in a similar manner for each of the specialist topic areas. The SoS recommends that a common format should be applied where possible.

Inter-relationships between environmental factors

A1.34 The inter-relationship between aspects of the environments likely to be significantly affected is a requirement of the EIA Regulations (see Schedule 4 Part 1 of the EIA Regulations). These occur where a

number of separate impacts, e.g. noise and air quality, affect a single receptor such as fauna.

A1.35 The SoS considers that the inter-relationships between factors must be assessed in order to address the environmental impacts of the proposal as a whole. This will help to ensure that the ES is not a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the Proposed Development. This is particularly important when considering impacts in terms of any permutations or parameters to the Proposed Development.

Cumulative Impacts

A1.36 The potential cumulative impacts with other major developments will need to be identified, as required by the Directive. The significance of such impacts should be shown to have been assessed against the baseline position (which would include built and operational development). In assessing cumulative impacts, other major development should be identified through consultation with the Local Planning Authorities and other relevant authorities on the basis of those that are:

- projects that are under construction;
- permitted application(s) not yet implemented;
- submitted application(s) not yet determined;
- all refusals subject to appeal procedures not yet determined;
- projects on the National Infrastructure's programme of projects; and
- projects identified in the relevant development plan (and emerging development plans - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

A1.37 Details should be provided in the ES, including the types of development, location and key aspects that may affect the EIA and how these have been taken into account as part of the assessment will be crucial in this regard.

A1.38 The SoS recommends that offshore wind farms should also take account of any offshore licensed and consented activities in the area, for the purposes of assessing cumulative effects, through consultation with the relevant licensing/consenting bodies.

A1.39 For the purposes of identifying any cumulative effects with other developments in the area, Applicants should also consult consenting bodies in other EU states to assist in identifying those developments (see commentary on Transboundary Effects below).

Related Development

- A1.40 The ES should give equal prominence to any development which is related with the Proposed Development to ensure that all the impacts of the proposal are assessed.
- A1.41 The SoS recommends that the Applicant should distinguish between the Proposed Development for which development consent will be sought and any other development. This distinction should be clear in the ES.

Alternatives

- A1.42 The ES must set out an outline of the main alternatives studied by the Applicant and provide an indication of the main reasons for the Applicant's choice, taking account of the environmental effect (Schedule 4 Part 1 Paragraph 18).
- A1.43 Matters should be included, such as inter alia alternative design options and alternative mitigation measures. The justification for the final choice and evolution of the scheme development should be made clear. Where other sites have been considered, the reasons for the final choice should be addressed.
- A1.44 The SoS advises that the ES should give sufficient attention to the alternative forms and locations for the off-site proposals, where appropriate, and justify the needs and choices made in terms of the form of the Development Proposed and the sites chosen.

Mitigation Measures

- A1.45 Mitigation measures may fall into certain categories namely: avoid; reduce; compensate or enhance (see Schedule 4 Part 1 Paragraph 21); and should be identified as such in the specialist topics. Mitigation measures should not be developed in isolation as they may relate to more than one topic area. For each topic, the ES should set out any mitigation measures required to prevent, reduce and where possible offset any significant adverse effects, and to identify any residual effects with mitigation in place. Any proposed mitigation should be discussed and agreed with the relevant consultees.
- A1.46 The effectiveness of mitigation should be apparent. Only mitigation measures which are a firm commitment and can be shown to be deliverable should be taken into account as part of the assessment.
- A1.47 It would be helpful if the mitigation measures proposed could be cross referred to specific provisions and/or requirements proposed within the draft DCO. This could be achieved by means of describing the mitigation measures proposed either in each of the specialist reports or collating these within a summary section on mitigation.

A1.48 The SoS advises that it is considered best practice to outline in the ES, the structure of the environmental management and monitoring plan and safety procedures which will be adopted during construction and operation and may be adopted during decommissioning.

Cross References and Interactions

A1.49 The SoS recommends that all the specialist topics in the ES should cross reference their text to other relevant disciplines. Interactions between the specialist topics is essential to the production of a robust assessment, as the ES should not be a collection of separate specialist topics, but a comprehensive assessment of the environmental impacts of the proposal and how these impacts can be mitigated.

A1.50 As set out in EIA Regulations Schedule 4 Part 1 Paragraph 23, the ES should include an indication of any technical difficulties (technical deficiencies or lack of know-how) encountered by the Applicant in compiling the required information.

Consultation

A1.51 The SoS recommends that ongoing consultation is maintained with relevant stakeholders and that any specific areas of agreement or disagreement regarding the content or approach to assessment should be documented. The SoS recommends that any changes to the scheme design in response to consultation should be addressed in the ES.

A1.52 Consultation with the local community should be carried out in accordance with the SoCC which will state how the Applicant intends to consult on the Preliminary Environmental Information (PEI). This PEI could include results of detailed surveys and recommended mitigation actions. Where effective consultation is carried out in accordance with Section 47 of the PA2008, this could usefully assist the Applicant in the EIA process – for example the local community may be able to identify possible mitigation measures to address the impacts identified in the PEI. Attention is drawn to the duty upon Applicants under Section 50 of the PA2008 to have regard to the guidance on Pre-application consultation.

Transboundary Effects

A1.53 The SoS recommends that consideration should be given in the ES to any likely significant effects on the environment of another Member State of the European Economic Area. In particular, the SoS recommends consideration should be given to discharges to the air and water and to potential impacts on migratory species and to impacts on shipping and fishing areas.

A1.54 The Applicant's attention is also drawn to the Planning Inspectorate's Advice Note twelve 'Development with significant transboundary impacts consultation' which is available on our website⁸.

Summary Tables

A1.55 The SoS recommends that in order to assist the decision making process, the Applicant may wish to consider the use of tables:

Table X: to identify and collate the residual impacts after mitigation on the basis of specialist topics, inter-relationships and cumulative impacts.

Table XX: to demonstrate how the assessment has taken account of this Opinion and other responses to consultation.

Table XXX: to set out the mitigation measures proposed, as well as assisting the reader, the SoS considers that this would also enable the Applicant to cross refer mitigation to specific provisions proposed to be included within the draft DCO.

Table XXXX: to cross reference where details in the HRA (where one is provided) such as descriptions of sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

Terminology and Glossary of Technical Terms

A1.56 The SoS recommends that a common terminology should be adopted. This will help to ensure consistency and ease of understanding for the decision making process. For example, 'the site' should be defined and used only in terms of this definition so as to avoid confusion with, for example, the wider site area or the surrounding site. A glossary of technical terms should be included in the ES.

Presentation

A1.57 The ES should have all of its paragraphs numbered, as this makes referencing easier as well as accurate. Appendices must be clearly referenced, again with all paragraphs numbered. All figures and drawings, photographs and photomontages should be clearly referenced. Figures should clearly show the proposed site application boundary.

⁸ Available from: <http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

Confidential Information

A1.58 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about 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. Where documents are intended to remain confidential the Applicant should provide these as separate paper and 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 Planning Inspectorate would be required to disclose under the Environmental Information Regulations 2014.

Bibliography

A1.59 A bibliography should be included in the ES. The author, date and publication title should be included for all references. All publications referred to within the technical reports should be included.

Non-Technical Summary

A1.60 The EIA Regulations require a Non-Technical Summary (EIA Regulations Schedule 4 Part 1 Paragraph 22). This should be a summary of the assessment in simple language. It should be supported by appropriate figures, photographs and photomontages.

APPENDIX 2 – LIST OF CONSULTATION BODIES FORMALLY CONSULTED

Note: the prescribed Consultees Bodies have been consulted in accordance with the Planning Inspectorate's Advice Note three 'EIA Consultation and Notification' (version 6, June 2015)⁹.

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	Thurrock Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England - East of England
The relevant fire and rescue authority	Essex County Fire and Rescue Service
The relevant police and crime commissioner	Police and Crime Commissioner for Essex
The Environment Agency	The Environment Agency - East Anglia
The Maritime and Coastguard Agency	Maritime & Coastguard Agency
The Marine Management Organisation	Marine Management Organisation
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Thurrock Council
The relevant strategic highways company	Highways England - East
Transport for London	Transport for London
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 Secretary of State for Defence	Ministry of Defence

⁹ Available from: <http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

RELEVANT STATUTORY UNDERTAKERS	
The relevant Clinical Commissioning Group	Thurrock Clinical Commissioning Group
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	East of England Ambulance Service NHS Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Road Transport	Transport for London
Dock and Harbour authority	Port of London Authority
Lighthouse	Trinity House
Civil Aviation Authority	Civil Aviation Authority
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 and Communities Agency
The relevant Environment Agency	Environment Agency - East Anglia
The relevant water and sewage undertaker	Anglian Water
	Essex and Suffolk Water
The relevant public gas transporter	Energetics Gas Limited
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	Fulcrum Pipelines Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	National Grid Gas Plc
	National Grid Gas Distribution Limited
	Scotland Gas Networks Plc
Southern Gas Networks Plc	
Wales and West Utilities Ltd	
The relevant electricity generator with CPO Powers	RWE Generation UK Plc (Tilbury B Power Station)
The relevant electricity distributor with CPO Powers	Energetics Electricity Limited
	ESP Electricity Limited
	G2 Energy IDNO Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks

RELEVANT STATUTORY UNDERTAKERS	
	Limited
	Peel Electricity Networks Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(B))
Thurrock Council
Brentwood District Council
Basildon District Council
Gravesham District Council
Dartford District Council
Castle Point District Council
London Borough of Havering
London Borough of Bexley
Medway Council
Essex County Council
Kent County Council
Greater London Authority

NON-STATUTORY CONSULTEES
Royal National Lifeboat Institution

APPENDIX 3 – RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

List of bodies who replied by the Statutory Deadline:

Anglian Water
Brentwood Borough Council
Castle Point Borough Council
Environment Agency
Essex County Council ¹⁰
Gravesham Borough Council
Health and Safety Executive
Historic England
Marine Management Organisation
Medway Council
National Grid Electricity Transmission Plc and National Grid Gas Plc (joint response)
National Grid Gas Distribution Limited
NATS
Natural England
Port of London Authority
Port of Tilbury London Limited
Public Health England
Royal Mail Group
Thurrock Borough Council
Transport for London
Trinity House

¹⁰ Essex County Council was given a later 28 day consultation deadline than all other consultees because an administrative error by the Planning Inspectorate resulted in a delay in the Council receiving the consultation letter. Therefore, whilst their response was after the 28 day deadline for all other consultees, it is not considered to be a late response.