

PLANNING ACT 2008
INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE)
RULES 2010

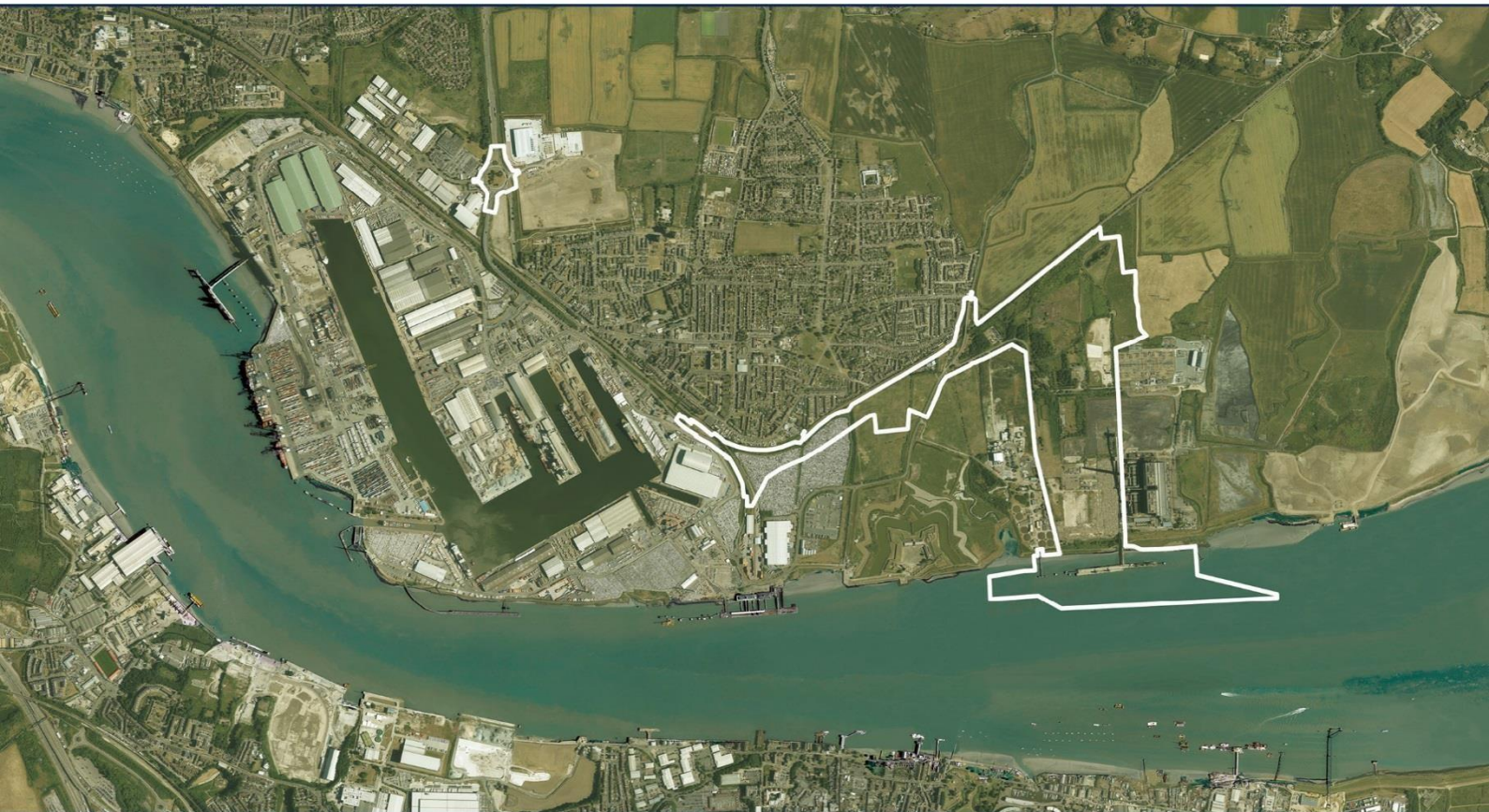
PROPOSED PORT TERMINAL AT
FORMER TILBURY POWER STATION

TILBURY2

TR030003

OXFORD BROOKS UNIVERSITY INDEPENDENT REVIEW OF
TILBURY2 CUMULATIVE IMPACT ASSESSMENT

TILBURY2 DOCUMENT REF:
PoTLL/T2/EX/183



FINDINGS OF INDEPENDENT PEER REVIEW

Findings of independent peer review of cumulative effects
assessment for Tilbury 2 new port terminal

Review undertaken by:

Impacts Assessment
Unit (IAU), School of
the Built Environment,
Oxford Brookes
University

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School of the Built
Environment,
Oxford Brookes
University,
Oxford
OX3 7BP

[https://www.brookes.ac.uk/b
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groups/impact-assessment/](https://www.brookes.ac.uk/b/research/research-groups/impact-assessment/)

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1. Introduction

- 1.1 Oxford Brookes University, Impact Assessment Unit (IAU) have been commissioned by Port of Tilbury London Limited (PoTLL) to undertake an Independent Peer Review of the Cumulative Effects Assessment (CEA) which formed part of the Environmental Statement (ES) and other Environmental Information submitted by PoTLL (the Applicant) under the Planning Act 2008 (PA2008) for the Tilbury2 new port terminal Development Consent Order (DCO) application.
- 1.2 Port of Tilbury London Limited (PoTLL) is proposing a new port terminal on the north bank of the River Thames at Tilbury, a short distance to the east of its existing Port. The proposed port terminal will be constructed on largely previously developed land that formed the western part of the now redundant Tilbury Power Station.
- 1.3 The project is known as “Tilbury2.” The proposed main uses on the site will be a Roll-on/Roll-off (Ro-Ro) terminal and a Construction Materials and Aggregates terminal (the “CMAT”), and associated infrastructure including rail and road facilities and revisions to the existing marine infrastructure. There will also be an 'access corridor' to provide links to the existing rail and road network. The CMAT will include stockpiling of construction materials and some processing of materials for the production of asphalt and concrete products.
- 1.4 The DCO application for Tilbury2 is supported by an ES produced in accordance with the **Infrastructure Planning (Environmental Impact Assessment) Regulations 2009** (as amended by the Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012).
- 1.5 The EIA Regulations¹ impose procedural requirements for carrying out EIA for Nationally Significant Infrastructure Projects (NSIPs) which fall to be considered as 'EIA development'. The ES is the document that reports on the likely impacts on the environment resulting from the proposed development. The ES must as a minimum comply with Schedule 4 Part 1 of the EIA Regulations. Advice published by the Planning Inspectorate states that the ES should clearly explain the processes followed, the forecasting methods used and the measures envisaged to prevent, reduce and where possible offset any significant adverse effects.
- 1.6 The review was carried out by experienced EIA practitioners with NSIP experience at the Oxford Brookes University Impact Assessment Unit (IAU). The IAU was established in the late 1970s with an initial focus on the assessment of the socio-economic impacts of major projects, particularly in the UK energy sector. Over the last 40 years IAU's remit has widened and it is now an internationally recognised centre for excellence for research, knowledge exchange and all aspects of environmental and social impact assessment. The work undertaken by staff within the IAU has always been 'close to practice'. Our current consultancy focus is on:

¹ Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012.

- Evaluating the quality of environmental statement/reports submitted with consent applications;
- Providing expert peer support to the environmental statement production;
- Providing expert input to aspects of the assessment process; and
- Audit/ follow up and compliance monitoring.

2. The Review Process

2.1. The following documents were reviewed as part of the evaluation:

- **Scoping Opinion from Secretary of State (SoS):** APP-033 May 2017; paragraphs 3.17, 3.23-3.28, 3.125 and A1.36-A1.39
- **Consultation Report:** APP-021 October 2017; paragraphs 2.5, Table 9.6, Table 15.6, 25 and Table 25.3
- **Non-Technical Summary (NTS):** APP-159 October 2017; paragraphs 3.125-3.136; Table 1.1 fails to mention cumulative effects.
- **Environmental Statement (ES) chapters:** APP-031 October 2017; paragraphs 2-40 to 2-64; Chapters 7 -12, 14-19; Chapter 20.
- **Mitigation Route Map:** APP-168 October 2017
- **Mitigation Route Map:** REP5-034 Version 2
- **Maps:** APP-097 May 2017 Figure 2-1 did not include LTC or TEC; APP-148 Figure 11-8 dredging CEA; REP3-027 May 2018, Appendices 1-3
- **Construction Environmental Management Plan:** REP3-011.
- **Operational Management Plan:** REP1-008
- **Operational Management Plan revised for Deadline 5:** REP5-022
- **Operational Management Plan: to be submitted post Deadline 5**
- **HRA Report submitted for Deadline 4:** REP4-018 TEC addressed in 6.2 and LTC in 6.3
- **Port of Tilbury London Limited - Update Habitats Regulations Assessment (HRA) Stage 2 Report – Clean:** REP5-032
- **Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing:** REP3-027 May 2018
- **PoTLL Deadline 5 Submissions. Update to the qualitative cumulative effects assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing PoTLL/t2/ex/147:** REP5-032.
- **Landscape and Ecology Management Plan (LEMP):** APP-061
- **Landscape and Ecology Management Plan (Version 3) Document Reference:** PoTLL/T2/EX/42
- **Glossary. V4 11 July 2018 Chapter 21 of ES (APP-031)**
- **Port of Tilbury London Limited - Ecological Mitigation and Compensation Plan Draft for Deadline 5 – Clean:** REP5-041

2.2 The evaluation, which comprised a desk top review, has been conducted using the IAU's CEA Analytical Framework² review package. This package was originally developed for a research project funded by the Natural Environment Research Council to evaluate practice in cumulative effects assessment in 2015. The approach, of applying grading criteria to assess the quality of practice, is adopted from a methodology originally developed by Manchester University³ to assess the quality of ES which was further developed by IAU for a research

² The IAU Oxford Brookes University CEA Review Package framework master is described in Broderick, M., Durning, B., and Sanchez, L., 2018. Chapter 19: Cumulative Effects. In Therivel R, Wood G, editors. *Methods of Environmental and Social Impact Assessment*. 4th ed. New York: Routledge; p. 649-677.

³ These are:

- Lee N & Colley R (1990), *Reviewing the Quality of Environmental Statements, Occasional Paper No. 24*, EIA Centre, University of Manchester; and as updated by Lee N, Colley R, Bonde R & Simpson J (1999),

project to assess the changing quality of ESs funded by the DoE, The Scottish and Welsh Offices in 1995/96.⁴ The IAU CEA review package is a robust mechanism for systematically reviewing the quality of practice and it has been fully updated to combine the requirements of the 2017 IP EIA Regulations⁵, as well as notions of best practice developed by the IAU.

- 2.3 The package is divided into 32 individual review criteria. Each criterion is graded on the basis of the quality of the material provided and is then awarded an overall grade. From the grades given to each section an overall grade for the CEA is determined. These grades are:

Assessment Grades	
A	= indicates that the work has generally been well performed with no important omissions;
B	= generally satisfactory and complete with only minor omissions and inadequacies;
C	= regarded as just satisfactory despite some omissions or inadequacies;
D	= indicates that parts are well attempted but, on the whole, just unsatisfactory because of omissions or inadequacies;
E	= not satisfactory, significant omissions or inadequacies.
F	= very unsatisfactory, important task(s) poorly done or not attempted.
N/A	= not applicable in the context of the ES or the project.

- 2.4 These grades can also be used to test an CEA's compliance with the relevant Regulations, with the pass/fail mark lying between grades 'C' and 'D'.

2.5 The fundamental strength of our approach to reviewing CEA/ESs is that we always provide a completely independent review and its findings are not influenced by the particular perspective of the body or organisation commissioning the review. This approach is important to both IAU and its clients because in demanding the freedom to apply an independent perspective we maintain the authority to suggest changes to a CEA/ES or to advise that a CEA/ES is of an acceptable standard. Furthermore this independent review, by experienced practitioners provides a more balanced and comparative assessment of the quality of a CEA/ES than would be the case if the review was influenced by any particular perspective on the development proposal itself. Thus our review of a CEA/ES can be relied upon as a fair and impartial review of an ES by all parties in the DCO examination process.

- 2.6 In conducting the review, every effort has been made to remain independent, objective and systematic, but it should be recognised that ultimately the attributing of individual grades to individual criterion is inherently a matter of professional judgement.

• *Reviewing the Quality of Environmental Statements and Environmental Appraisals, Occasional Paper No55*, EIA Centre, University of Manchester.

⁴ The IAU ES Review Package is set out in Glasson, J, Therivel, R and Chadwick A (2012) *Introduction to Environmental Impact Assessment*, 4th Ed. Routledge

⁵ The requirements of Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. (No. 572) have been added to this version.

3. Context of CEA/ES Review

3.1 Under the IP EIA 2009, as amended 2012 Regulations⁶, Schedule 4 Part 1 states:

*“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 longterm, permanent and temporary, positive and negative effects of the development....”*

3.2 The need to consider cumulative effects in planning and decision making is also set out in the National Policy Statements. In the National Policy Statement (NPS) for Ports (NPSP)⁷ paragraph 4.7.3 states that:

“When considering cumulative effects, the ES should provide information on how the effects of the applicant’s proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence).”

3.3 NPS paragraph 4.7.4 states that the Secretary of State should consider how the:

“accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.”

3.4 Where an ES is deemed by the competent authority not to be adequate, Regulation 17 makes provision for a request to the Applicant for further information to be submitted and for that further information to be subject to the same publicity and public notification procedures as the original ES. This provision provides added strength to the requirements for minimum information as required by the EIA Directive on which the Regulations are based.

3.5 If competent authorities do not have before them a complete ES, and further information is not supplied by the developer to complete the ES, then by virtue of Regulation 3 the appropriate authority may not grant consent for the project. Should they do so, the decision could be open to a judicial review challenge. It is this requirement that the ES is complete in terms of the minimum environmental information and any other information required by the competent authority, that gives force to the need for a systematic review of a CEA/ES. A clear systematic review of the CEA/ES provides an early indication of whether the ES is complete and/or identifies those areas where further information is required to make the ES complete.

3.6 The findings of the peer review are that the documentation evaluated is overall graded as **B*/C**⁸ i.e. as generally satisfactory despite some omissions and inadequacies because:

- NTS Table 1.1 failed to mention cumulative effects;

⁶ 2009 No. 2263 INFRASTRUCTURE PLANNING The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 and (Amendment) Regulations 2012.

⁷ Department for Transport (2012) National Policy Statement for Ports available at <https://www.gov.uk/government/publications/national-policy-statement-for-ports>

⁸ Where grades are split e.g. B/C an asterisk will signify in which direction the grade is leaning too e.g. B/C*.

- Paragraph 1.26 of the Environmental Statement (ES) states 2009 IP EIA Regulations apply but paragraph 20.1 states:

*“The Environmental Impact Assessment (EIA) Directive and the Infrastructure Planning (EIA) Regulations 2017 (**‘EIA Regulations’**) require an ES to include the assessment of the inter-relationship between environmental topics and an assessment of cumulative effects with other development.”;*

- Four stage PINS Advice Note¹⁷⁹ process followed but no explicit “long-list” table is produced;
- Lower Thames Crossing (LTC) and Tilbury Energy Centre (TEC) should have been on a “long-list”;

3.7 The detailed findings of the CEA review, along with some brief comments are presented in the remainder of this report.

⁹ Planning Inspectorate Advice Note 17 Cumulative Effects Assessment available at <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

4. Findings of CEA Review

The IAU review grades are:

A =	indicates that the work has generally been well performed with no important omissions;
B =	work is generally satisfactory and complete with only minor omissions and inadequacies;
C =	work is regarded as just satisfactory despite some omissions or inadequacies;
D =	indicates that parts are well attempted but, on the whole, just unsatisfactory because of omissions or inadequacies;
E =	work is not satisfactory, revealing significant omissions or inadequacies;
F =	work is very unsatisfactory with important task(s) poorly done or not attempted.

Table 1: Review Grades

These grades can be used to test the CEA's compliance with the relevant Regulations¹⁰, with the pass/fail mark lying between grades 'C' and 'D'. By using this grading system, the reviewer can more readily identify the aspects of the ES/CEA that need completing and because the grading system is well established, the competent authority can confidently justify any requests for further information. Where grades are split e.g. B/C an asterisk will signify in which direction the grade is leaning too e.g. B/C*.

¹⁰ *Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended by the Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012).*"

Project details:	<p>Location: Thames Estuary</p> <p>Status: Currently undergoing Examination under Planning Act 2008</p> <p>Proponent: Port of Tilbury Limited (PoTLL)</p> <p>Lead author of ES/CEA: Vincent and Goring - Planning Consultants, EIA Co-ordination, Consultant Team Co-ordinators supported by: Atkins - Port terminal masterplanning and engineering, hydrogeology and ground conditions, water resources, marine ecology, marine navigation, noise and vibration, air quality, natural resources and waste; i-Transport -Transportation; Arup - Socio-Economics and Health; David Jarvis Associates - Landscape Character and Visual Amenity; CgMs - Archaeology and Cultural Heritage; Bioscan -Terrestrial Ecology; and Pinsent Masons - Solicitors.</p>
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<i>CEA assessment criteria^{11 12}</i>	<i>Observations</i>	<i>Grade¹³</i>
<p>1) How and where is pertinent CEA information included in the documents submitted to the Examination^{14?}</p>	<ul style="list-style-type: none"> • Scoping Opinion from Secretary of State (SoS): APP-033¹⁵ May 2017; paragraphs 3.17, 3.23-3.28, 3.125 and A1.36-A1.39 • Consultation Report: APP-021 October 2017; paragraphs 2.5, Table 9.6, Table 15.6, 25 and Table 25.3 • Non Technical Summary (NTS): APP-159 October 2017; paragraphs 3.125-3.136; Table 1.1 fails to mention cumulative effects. • Environmental Statement (ES) chapters: APP-031 October 2017; paragraphs 2-40 to 2-64; Chapters 7 -12, 14-19; Chapter 20. <p>At paragraph 20.1 it states:</p> <p><i>"This chapter considers the synergistic (in-combination) and cumulative effects of Tilbury2. The Environmental Impact Assessment (EIA) Directive and the Infrastructure Planning (EIA) Regulations 2017 ('EIA Regulations') require an ES to include the assessment of the inter-relationship between environmental topics and an assessment of cumulative effects with other development."</i></p> <p>This contradicts the statement at paragraph 1.26 which states:</p> <p><i>"Certain categories of development are required by European and UK domestic legislation to be made the subject of Environmental</i></p>	<p>C</p>

¹¹ Modified from Kotze, (2001). Integrating the Assessment of Cumulative Effect into Environmental Effect Assessment and Strategic Environmental Assessment in South Africa. Environmental Assessment Yearbook 2001. Institute of Environmental Management and Assessment and the EIA Centre (University of Manchester).

¹² Renewable UK - Guiding Principles for Cumulative Effect Assessment in Offshore Wind Farms. July 2013

¹³ The IAU Oxford Brookes University Environmental Statement Review Package framework master is contained in Appendix 5 of Glasson et al (forthcoming) Introduction to Environmental Effect Assessment (5th Edition), Routledge

¹⁴ Tilbury2 Examination Library Updated - 26.06.2018

¹⁵ Tilbury2 Examination Library Updated - 26.06.2018 numbering

<i>CEA assessment criteria^{11 12}</i>	<i>Observations</i>	<i>Grade¹³</i>
	<p><i>Impact Assessment (EIA). The EIA regime in Europe is governed by Directive 2011/92/EU on the assessment of the effects of public and private projects on the environment. This directive is implemented for the purposes of NSIPs by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended by the Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012)."</i></p> <ul style="list-style-type: none"> • Mitigation Route Map: APP-168 October 2017 • Maps: APP-097 May 2017 Figure 2-1 did not include LTC or TEC; APP-148 Figure 11-8 dredging CEA; REP3-027 May 2018, Appendices 1-3 • Construction Environmental Management Plan: REP3-011. • Operational Management Plan: REP1-008 • Operational Management Plan revised for Deadline 5: REP5-022 • Operational Management Plan: to be submitted post Deadline 5 • HRA Report submitted for Deadline 4: REP4-018 TEC addressed in 6.2 and LTC in 6.3 • Port of Tilbury London Limited - Update Habitats Regulations Assessment (HRA) Stage 2 Report – Clean: REP5-032 • Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing: REP3-027 May 2018 • PoTLL Deadline 5 Submissions. Update to the qualitative cumulative effects assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing PoTLL/t2/ex/147: REP5-032. • Landscape and Ecology Management Plan (LEMP): APP-061 • Landscape and Ecology Management Plan (Version 3) Document Reference: PoTLL/T2/EX/42 • Glossary. V4 11 July 2018 Chapter 21 of ES (APP-031) • Port of Tilbury London Limited - Ecological Mitigation and Compensation Plan Draft for Deadline 5 – Clean: REP5-041 	

<p>2) What is the definition of CEA stated in the ES?</p>	<p>The ES (APP-031) at para. 2.9 states:</p> <p><i>"Cumulative: comprising multiple effects from different sources within the proposals (synergistic or interrelationships), or cumulatively with other developments (additive), on the same receptors"</i></p> <p>Para. 2.5 of the ES states:</p> <p><i>"As set out in IEMA Guidance (2011), in-combination (synergistic) and cumulative effects are defined as:</i></p> <ul style="list-style-type: none"> • <i>Intra-projects effects or "in-combination effects (synergistic): These</i> 	<p>B*/C</p>
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	<p><i>effects occur between different environmental topics within the same proposal and as a result of the development's direct effects.</i></p> <ul style="list-style-type: none"> • <i>Inter-project effects or 'cumulative effects' (additive): These effects occur as a result of the combined action of a number of different projects cumulatively with the project being assessed and on a single resource or receptor."</i> <p>The use of the terms additive and synergistic and their definition accords with best practice as described in:</p> <p>Broderick, M., Durning, B., and Sanchez, L., 2018. Chapter 19: Cumulative Effects. <i>In</i> Therivel R, Wood G, editors. <i>Methods of Environmental and Social Impact Assessment</i>. 4th ed. New York: Routledge; p. 649-677.</p> <p>Natural England reviewed all the latest CEA international best practice in 2014¹⁶ including: CEQ (1997); Hyder (1999); English Nature (2001); English Nature (2006); Natural England (2007); Canter (2008); King et al. (2009); Canter (2012); Kershaw (2012); SNH (2012); RUK/NERC (2013); IFC (2013) and in their view the this definition of CEA is:</p> <p><i>"the most comprehensive and appropriate definition of cumulative impacts".</i></p> <p>The ES Glossary Chapter 21 definition of cumulative and synergistic however does not explicitly use the term additive as found in ES Chapters 2 and 20 definitions.</p>	
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<p>3) How are cumulative effects i.e. additive, incremental, distinguished from synergistic¹⁷ effects?</p>	<p>Cumulative and Synergistic effects defined in Chapter 21 Glossary as:</p> <p>Cumulative</p> <p><i>" Effects that occur as a result of the combined action of a number of different projects cumulatively with the project being assessed and on a single resource or receptor"</i></p> <p>Synergistic</p> <p><i>"Two or more effects that combine to have an effect on a single receptor (sometimes described as in-combination effects)".</i></p>	<p>B</p>
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¹⁶ Natural England 2014. *Development of a generic framework for informing cumulative impact assessments (CIA) related to Marine Protected Areas through evaluation of best practice*. NECR147 <http://publications.naturalengland.org.uk/publication/6341085840277504>.

¹⁷ Sometimes referred to as "in combination" effects in EIA. However, the Habitats Directive uses "in combination" to mean cumulative effects (both additive and synergistic).

<p>4) What methods are used to undertake scoping?</p>	<p>An EIA Scoping Report was sent to the Local Planning Authority, Thurrock Council, on 25 August 2016 (LPA reference 16/01194/SCO). This was prior to final throughput assumptions being settled and prior to the conclusion being reached that the proposals exceeded the thresholds in the Planning Act 2008. The responses to this report were taken into account in preparing the final Scoping Report as were comments made by various statutory consultees in meetings before that time.</p> <p>PoTLL's draft Scoping Report was issued to consultees on 27 February 2017 and the deadline for comments to be received was 17 March 2017. The above process fed into the production of the final Scoping Report that was submitted to PINS on 25 March 2017 as part of a request for a Scoping Opinion.</p> <p>PINS issued the Secretary of State's Scoping Opinion on 5 May 2017 (Appendix 2.A of the ES). Its contents (and the responses of consultees to inform the Opinion) were then taken into account in preparing the PEIR, which was itself the subject of further consultation.</p>	<p>B</p>
<p>5) Has the scoping been iterative i.e. reviewed and revisited?</p>	<p>Yes. In all six drafts were produced.</p> <ul style="list-style-type: none"> • Draft to statutory consultees for comment NSIPS Scoping Report Draft v3 27 February 2017 • Final draft to Consultants NSIPS Scoping Report Draft v4 21 March 2017 • Final draft to Client and PM NSIPS Scoping Report Draft v5 23 March 2017 • Final Draft for Submission NSIPS Scoping Report Draft v6 24 March 2017 	<p>B</p>
<p>6) How were stakeholders engaged?</p>	<p>Stakeholder engagement is documented in Consultation Report: APP-021 October 2017 at paragraphs 2.5, Table 9.6, Table 15.6, 25 and Table 25.3</p>	<p>B</p>
<p>7) How are relevant stakeholder CEA responses recorded in the ES?</p>	<p>Under the PA2008, there are 3 key statutory requirements in respect of pre-application consultation and publicity:</p> <ul style="list-style-type: none"> • Section 42 consultation with prescribed consultees (e.g. Natural England (NE), Environment Agency (EA), Historic England (HE), local authorities (section 43), landowners and others with interests in land (section 44); 	<p>B</p>

	<ul style="list-style-type: none"> • Section 47 consultation with the local community in accordance with the Statement of Community Consultation (SoCC); and • Section 48 publicity of the proposed application. <p>Section 42, section 47 and section 48 consultation and publicity stages on Tilbury2 were run in parallel from 19th June – 28th July 2017 (inclusive). Pre-application nonstatutory consultation was also undertaken prior to the submission of the Scoping Report from 6th March - 21st April 2017 (inclusive).</p> <p>As part of the statutory consultation, PoTLL published a Preliminary Environmental Information Report (PEIR). This contained the information which PoTLL had compiled at that time about the likely significant environmental effects of the proposals. Consultees were encouraged to respond to the information contained in the PEIR and other reports. A series of public consultation events were held and a questionnaire was provided at these events and on the Tilbury2 website (www.tilbury2.co.uk). This asked for feedback in relation to the principle of the proposed expansion to the Port, access proposals and environmental effects.</p> <p>A Consultation Report (CR) (Document Reference APP-021) was produced to accompany the DCO application (as required by section 37), which details how PoTLL complied with the consultation requirements of the PA2008 and sets out specifically what the applicant has done in compliance with relevant secondary legislation, guidance and advice, as set out in that document. The CR also reports on the outcome of the statutory consultation process and, where relevant, how responses have been taken into account in the preparation of the application documentation, including the ES. Details of the Section 42, 47 and 48 consultation processes are set out in Chapters 4 – 6 of the CR. A summary of all responses and PoTLL response to them is included in Chapters 8 – 26 of the CR.</p> <p>Each of the chapters within the Environmental Statement summarise the engagement with stakeholders relevant to each topic area and how the proposals and assessment process has responded to comments received.</p>	
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<p>8) Are spatial/geographical boundaries for the project clearly established overall?</p>	<p>The principles of the four stage assessment approach to cumulative assessment, as outlined in Advice Note 17, was adopted by PoTLL as follows:</p> <ul style="list-style-type: none"> • Stage 1: Establish the NSIP’s Zone of Influence (ZOI) and Long List of ‘Other Development’. The Zone of Influence was assumed to be 15km incorporating the Thurrock Local Authority area and all surrounding local authority areas. This was considered to be a ‘worst case’ ZOI and the actual ZOI of Tilbury2 would be significantly smaller in practice; 	<p>B</p>
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	<ul style="list-style-type: none"> • Stage 2: Identify Shortlist of 'Other Development' - apply threshold criteria based on temporal scope, the scale and nature of other development and any other relevant factors to assist in deciding whether to include or exclude 'other development'; • Stage 3: Information Gathering - compile detailed information on the 'other development' shortlisted, including proposed design and location, programme of construction, operation and decommissioning and environmental assessment information; • Stage 4: Assessment - assess the cumulative effects of the proposed NSIP with the 'other development' based on factors including duration of effect, extent of effect, type of effect, frequency of the effect, value and resilience of receptors and likely success of mitigation. 	
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<p>9) How are the temporal boundaries established?</p>	<p>The current implementation strategy proposes that, subject to the DCO being approved by the Secretary of State, main construction works would commence in Q1 2019. The infrastructure corridor, setting out of the RoRo terminal and marine works would be complete within one year such that the site would become operational with the opening of the RoRo terminal in Q1 2020. Construction on-site for the remainder of the terrestrial works including the CMAT would continue for another 12 months. However, for the purposes of environmental impact assessment, it is assumed that the site will be used to its maximum capacity from opening, albeit in practical terms the reality will be that there will be a period of growth in throughput over a number of years before the actual maximum capacity is reached.</p> <p>Topic specific chapters of the ES set out the environmental impact assessments of the construction and operation effects of the proposals.</p> <p>The Transport Assessment, as per good practice, considers the impact of the proposals at opening (2020) and 10 years from the date of the application (2027). In each case the comparison includes both committed development and other growth in jobs in each period; the latter would include any remaining growth at the existing Port.</p> <p>The environmental assessment process has not assessed decommissioning. The proposals are unlike other infrastructure proposals such as power generating facilities where a reasonable estimate of design life can be established. Ports do not have a finite life. The existing Port of Tilbury has been in existence for 130 years, and there are no plans for it to be decommissioned whilst it remains a going concern. It is PoTLL's intention that this would also be the case</p>	<p>B*/C</p>
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	<p>for Tilbury2 once it is operational. Indeed, whilst changes to the facilities provided at the site (such as modification to the jetty) could in the long term be required in response to matters such as technological change, as with the existing Port, a scenario where the entire site is decommissioned is considered highly unlikely. Furthermore, because of the expected perpetual life of the Port, the choices that are made as to the design and use of materials in the construction of the new Port facilities that make up the proposals would not need to consider later decommissioning, and the environmental considerations that flow from that process, as it would not be expected that they would be decommissioned.</p>	
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<p>10) Is the temporal scope for analysis clearly established ?</p>	<p>In the Scoping Report the temporal scope for analysis is only explicitly identified for waste at paragraph 7.387.</p> <p>It is done explicitly in chapters 2, 8, 10, 16, 18, 19 and 20 of the ES and Table 2-3. Chapter 2 in the ES (APP-031) paragraphs 2.22-2.27 does establish the temporal scope.</p>	<p>B*/C</p>
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<p>11) What range of other projects are considered¹⁸? In scoping cumulative effects, RFFPs, plans and activities should be identified through consultation with the local planning authorities and other relevant authorities on the basis of those that are:</p> <p>(i) under construction; (ii) permitted application(s), but not yet under construction; (iii) submitted application(s) not yet determined; (iv) those registered with PINS (v) identified in the relevant Development Plan, and (vi) Identified in other plans and programmes (as appropriate) which set the framework for future</p>	<p>PoTLL used the following criteria to identify schemes which could result in potential cumulative effects with Tilbury2 in accordance with Table 3 in Advice Note 17:</p> <ul style="list-style-type: none"> • Projects under construction; • Permitted application(s), but not yet implemented; • Submitted application(s), not yet determined; • Projects on the PINS Programme of Projects; • Identified in the relevant Development Plan (and emerging Development Plan – with appropriate weight being given as they move closer to adoption) recognising that information on any relevant proposals may be limited; and • Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward. <p>However, Lower Thames Crossing (LTC) and Tilbury Energy Centre (TEC)²¹ were not included in the original longlist as Tier 3 projects. PoTLL has attempted to address cumulative effects, qualitatively and at a high level, for LTC and TEC despite the fact</p>	<p>C</p>
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¹⁸ 2017 IP and TCP EIA Regulations has narrowed this to “existing and/or approved” projects.

²¹ Tier 2 projects now as Scoping Reports were submitted on 2/11/17 and 16/4/18 respectively.

<p>development consents/ approvals, where such development is reasonably likely to come forward.^{19 20}</p>	<p>that significant information and data is currently missing or sparse through :</p> <ul style="list-style-type: none"> • Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing: REP3-027 May 2018. • PoTLL Deadline 5 Submissions. Update to the qualitative cumulative effects assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing PoTLL/t2/ex/147 	
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<p>12) Is there a tabulated long list of Reasonably Forseeable Future Projects (RFFPs)?</p>	<p>Not explicitly. LTC, TEC and London Resort have been ruled out of the assessment for the reasons detailed in paragraphs 2.48-2.63 of the ES.</p>	<p>C/D*</p>
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<p>13) Is there a map of RFFPs?</p>	<p>APP-097 May 2017 Figure 2-1 did not include LTC or TEC; APP-148 Figure 11-8 dredging CEA; REP3-027 May 2018, Appendices 1-3</p>	<p>C</p>
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<p>14) Is the long list of RFFPs reduced to a short list of CEA Projects to be cumulatively assessed?</p>	<p>The principles of the four stage assessment approach to cumulative assessment, as outlined in Advice Note 17, was adopted as follows:</p> <ul style="list-style-type: none"> • Stage 1: Establish the NSIP's Zone of Influence (ZOI) and Long List of 'Other Development'. The Zone of Influence was assumed to be 15km incorporating the Thurrock Local Authority area and all surrounding local authority areas. This was considered to be a 'worst case' ZOI and the actual ZOI of Tilbury2 would be significantly smaller in practice. • Stage 2: Identify Shortlist of 'Other Development' - apply threshold criteria based on temporal scope, the scale and nature of other development and any other relevant factors to 	<p>C</p>
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¹⁹ PINS [Advice note nine: Rochdale Envelope](#) (PDF 450 KB) Republished April 2012 (version 2); PINS Advice Note 17 CEA April 2015

²⁰ DCLG Planning Act 2008. Guidance on the pre-application process. January 2013. Para 87 states:

"It may not always be easy for applicants to assess potential effects fully due to lack of available information. In such circumstances, applicants should take a pragmatic approach when determining what is feasible and reasonable. They should satisfy themselves that they have made all reasonable efforts to identify the main effects and to include mitigation measures in their draft Order. There may be occasions when projects assessed for cumulative effects will not ultimately be built - so only those identified through scoping opinion, or for which development consent has been granted or applied for, should reasonably be considered. As with the parameters for the Rochdale Envelope, applicants should fully explain their options to the Secretary of State as part of their application. National Policy Statements provide a useful overview of common effects and ways of mitigating them."

	<p>assist in deciding whether to include or exclude 'other development'</p> <ul style="list-style-type: none"> • Stage 3: Information Gathering - compile detailed information on the 'other development' shortlisted, including proposed design and location, programme of construction, operation and decommissioning and environmental assessment information. • Stage 4: Assessment - assess the cumulative effects of the proposed NSIP with the 'other development' based on factors including duration of effect, extent of effect, type of effect, frequency of the effect, value and resilience of receptors and likely success of mitigation. <p>A tabulated long list was never produced, but using the categories in Question 11 above, developments have been identified and shortlisted by reference to local knowledge, published information and through consultation on the EIA Scoping Report in February and March 2017 with the local planning authorities in the area. Based on the study areas established by each environmental topic and consultation with the local planning authorities, the ZOI was assumed to be 15km incorporating the Thurrock Local Authority area and all surrounding local authority areas. This was considered to be a 'worst case' ZOI and the actual ZOI of Tilbury2 would be significantly smaller in practice.</p> <p>The short list of developments that are included in the cumulative assessments in this ES are listed and described in Table 2.2 in Chapter 2 of the ES. The locations of the developments are shown in Figure 2.1.</p>	
<p>15) Are reasons for ruling RFFPs out given i.e. source – pathway – receptor?</p>	<p>Yes, but not consistently. At paragraphs 2.48-2.63 of the ES (APP-031).</p> <p>This was added to by the production of the Qualitative CEA:</p> <ul style="list-style-type: none"> • REP3-027 May 2018. • PoTLL Deadline 5 Submissions. Update to the qualitative cumulative effects assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing PoTLL/t2/ex/147 	<p>B*/C</p>
<p>16) Is there a tabulated short list of CEA Projects?</p>	<p>Yes, Table 2-2 of the ES (APP-031).</p>	<p>B</p>

<p>17) Is there a map of the short list CEA Projects'?</p>	<p>Yes APP-097 May 2017 Figure 2-1.</p>	<p>B</p>
<p>18) How have the receptors been defined?</p>	<p>Sensitive receptors were identified in the Scoping Report, ES Chapters 7-20 (APP-021) and in the HRA Report (REP4-018).</p> <p>The receptors considered in the ES have been sub-divided into the following groups:</p> <ul style="list-style-type: none"> • human - residents, including sensitive receptors and vulnerable groups; • human - all active travellers, i.e. road users, cyclists, and pedestrians; • ecological receptors – protected species and existing habitats, including water bodies; and • heritage assets. 	<p>B</p>
<p>19) Has it been determined what past, present and future human activities (sources) have affected or will affect these receptors,</p>	<p>Yes.</p> <p>Within the 4 broad groups in Question 18 above, individual receptors or groups of receptors that are adversely affected by the proposals have been considered. The potential effects acting upon these receptors are changes in noise, water quality, air quality, visual intrusion and traffic (rail and road). The assessment considers significant adverse residual effects, after mitigation has been taken into account.</p>	<p>B</p>
<p>20) Is it clearly defined what the 'source-pathway-receptor' links are?</p> <p>Are the:</p> <ul style="list-style-type: none"> - Source - Pathway - Receptors identified? 	<p>Yes, but only in part in ES Chapters 11 (see Tables 11.57, 11.60, 11.61), 12, 15 and 20.</p>	<p>C</p>

<p>21) Were the environmental threshold, pollution, climate or baseline conditions fully understood or established – were there any uncertainties or limitations?</p>	<p>Yes, but only in part.</p> <p>The threshold criteria defined in the ES Table 20.3 have been used to identify those residential receptors which may experience synergistic effects from air quality, visual and noise impacts. Significance descriptors are derived from the residual impact assessments in the relevant topic chapters, (taking into consideration mitigation measures that have been identified in those chapters).</p>	<p>B/C*</p>
<p>22) Have any thresholds or indicators of significant effect been defined or established?</p>	<p>These are described in paragraphs 2.31- 2.38 of the ES. The significance of an environmental effect is typically a function of the ‘value’ or ‘sensitivity’ of the receptor and the ‘magnitude’ or ‘scale’ of the impact. Combining the environmental value of the resource or receptor with the magnitude of change produces a significance of effect category.</p> <p>In arriving at the significance of effect, the assessor also considers whether the effect is direct, indirect, secondary, cumulative, short, medium or long-term, permanent or temporary, positive or negative.</p> <p>To establish a consistent assessment approach, there is merit in the use of a Significance Matrix and standard terminology as the basis for assessment of significance thresholds for each individual topic, where this is possible. The Significance Matrix and terminology are described in Table 2.1 of the ES.</p> <p>In terms of NSIPs, and in the context of the EIA Regulations 2009 (Part 1 of Schedule 4), PoTLL has defined ‘significant’ effects as those where the significance of the effect is ‘moderate’ or greater.</p>	<p>B</p>
<p>23) Were tools used to evaluate the cumulative (sensu lato) effect e.g. network analysis, carrying capacity,</p>	<p>A wide range of appropriate quantitative modelling tools were used for noise (underwater included), port capacity, 3 D digital terrain, hydrodynamic, air quality, water quality, traffic supported by qualitative discussion based on professional judgement.</p>	<p>B</p>

<p>ecosystems analysis etc)?</p> <p>Are the quantitative tools supported by qualitative discussion based on professional judgement?</p>		
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<p>24) Are mitigation measures proposed and mitigation measures assessed?</p>	<p>Mitigation measures are proposed in the assessment chapters 7-19 of the ES and are summarised in Table 20-1 specifically for cumulative effects.</p>	<p>B</p>
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<p>25) In mitigation recommendations, were alternatives recommended to mitigate cumulative effect specifically?</p>	<p>Alternatives were not recommended to mitigate cumulative effects specifically.</p> <p>However, the design process has allowed mitigation measures to be incorporated in the proposals. This is termed “embedded mitigation”. Where potentially significant adverse environmental effects were identified during the assessment process, appropriate mitigation was developed and described in chapters 7-19 of the ES as an iterative part of design development following the hierarchy below:</p> <ul style="list-style-type: none"> • Avoidance – incorporate measures to avoid the effect, for example, alternative design options or modifying the construction programme to avoid environmentally sensitive periods; • Reduction – incorporate measures to lessen the effect such as implementing a code of construction practice to reduce the potential impacts from construction activities; and • Compensation – to be considered in the circumstances where mitigation at the affected location is not possible to avoid or reduce a significant effect, such as offsite provision of new ecological habitat. 	<p>C</p>
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<p>26) Are residual effects after mitigation considered? Are they clearly stated and defended?</p>	<p>Yes they are summarised in Chapter 20 of the ES but not explicitly linked to Construction Environmental Management Plan (CEMP), Landscape and Ecology Management Plan (LEMP) and Operational Management Plan (OMP).</p> <p>The LEMP does consider them at paragraphs 1.9-1.13</p>	<p>B/C*</p>
<p>27) Is monitoring proposed?</p>	<p>It is alluded to at paragraph 20.52 of the ES (APP-031) as part of the Operational Management Plan (OMP).</p> <p>The Operational Management Plan to be submitted post Deadline 5 discusses monitoring in section 2:</p> <p><i>” The framework for monitoring set out in this OMP relates closely to the predicted effects of the Tilbury2 proposals. As part of the environmental assessment process, a number of ‘cumulative’ projects have been identified, the environmental effects of which in the future could interact with the environmental effects of Tilbury2 creating and the potential for cumulative environmental effects. The monitoring proposed within this OMP will be designed to be equally effective in identifying the contribution of Tilbury2 should such cumulative effects arise, thereby ensuring that the mitigation proposals for Tilbury2 are fit for purpose and that the proper planning, design mitigation strategies of other projects in the vicinity can appropriately interact with Tilbury2 mitigation should such effects arise. By this approach, monitoring of cumulative effects will form part of the on-going monitoring regime.”</i></p> <p>The Landscape and Ecology Management Plan (Version 3) Document Reference: PoTLL/T2/EX/42 discusses monitoring in paragraphs 1.9-1.13 and 5.1.</p>	<p>B*/C</p>
<p>28) Is there an Environmental Management Plan (EMP), Construction EMP or any other MP?</p>	<p>Mitigation Route Map: APP-168 October 2017</p> <p>Construction Environmental Management Plan (CEMP): REP3-011.</p> <p>Operational Management Plan (OMP): REP1-008</p> <p>Operational Management Plan revised for Deadline 5</p> <p>Landscape and Ecology Management Plan (Version 3) Document Reference: PoTLL/T2/EX/42</p>	<p>B</p>

<p>29) Were potential cumulative effects included in the monitoring or management plan?</p>	<p>Yes in the Operational Management Plan revised for Deadline 5 discusses monitoring in section 2 and in the Landscape and Ecology Management Plan (Version 3) Document Reference: PoTLL/T2/EX/42 discusses monitoring in paragraphs 1.9-1.13 and 5.1.</p> <p>Not mentioned explicitly in the Mitigation Route Map, CEMP, OMP or in Table 5 of embedded mitigation and monitoring measures (EMMM) of the HRA Report submitted for Deadline 4: REP4-018 nor in the updated HRA report (REP5-032).</p>	<p>C</p>
<p>30) How are cumulative effect summarised in the non-technical summary</p>	<p>The NTS (APP-159 October 2017) describes the CEA at paragraphs 3.125-3.136. However, Table 1.1 fails to mention cumulative effects.</p>	<p>C</p>
<p>31) Do you have any observations on uncertainties and limitations of the CEA?</p>	<p>Where uncertainty is considered to be significant as is the case currently with LTC and TEC, there is merit in looking at these issues in more detail as it is important to always explicitly detail the uncertainty and limitations in the assessment. Where there is insufficient evidence this will necessarily preclude a meaningful quantitative assessment, as it could not be appropriate for developers e.g. PoTLL, to make assumptions about the detail of future projects in such circumstances. However, PoTLL has attempted to address cumulative effects qualitatively²², because information and data that is available is sparse. When information is missing, sparse or unavailable as in LTC, it is important to ensure that the situation and rationale for assessment conclusions are adequately documented. However, the focus of the assessment should always be on those project or activities for which sufficient relevant information exists. This approach is supported by DCLG Guidance and practitioner best practice.</p> <p>DCLG Planning Act 2008. Guidance on the pre-application process. January 2013. Para 87 states:</p> <p><i>“It may not always be easy for applicants to assess potential impacts fully due to lack of available information. In such circumstances, applicants should take a pragmatic approach when</i></p>	<p>N/A</p>

²² Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing: REP3-027 May 2018 and PoTLL Deadline 5 Submissions. Update to the qualitative cumulative effects assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing PoTLL/t2/ex/147

determining what is feasible and reasonable. They should satisfy themselves that they have made all reasonable efforts to identify the main impacts and to include mitigation measures in their draft Order. There may be occasions when projects assessed for cumulative impacts will not ultimately be built - so only those identified through scoping opinion, or for which development consent has been granted or applied for, should reasonably be considered. As with the parameters for the Rochdale Envelope, applicants should fully explain their options to the Secretary of State as part of their application. National Policy Statements provide a useful overview of common impacts and ways of mitigating them.”

Renewables UK (2013) state in their Guiding Principle 7 on CEA:

”Developers will consider projects, plans and activities which have sufficient information available in order to undertake the assessment.

”Developers are only able to assess quantitatively those projects with a sufficient level of data i.e. number of turbines, hub height, blade tip length, clearance above sea level, separation distances between turbines, cable route, landfall, scoping report. Projects without this level of detail cannot be assessed as comprehensively and where information is lacking or sparse developers’ consideration of cumulative impacts will be necessarily at a lower resolution. It may not always be easy for developers to assess potential impacts fully due to lack of available information. In such circumstances, developer should take a pragmatic approach when determining what is feasible and reasonable.”

Guiding Principle 10 states:

”Uncertainty (due to the absence of data or uncertainty due to natural variation) can make it difficult to be definitive about a potential impact and it is crucial to define any uncertainty and seek to understand, minimise and communicate it. A “precautionary but pragmatic” approach, based around the best available scientific evidence, will be used where baseline data or data about the environmental effect of a project are incomplete.”

Natural England in their 2014 CEA review²³ state:

*“In order to undertake a meaningful assessment, it is important that sufficient information is available for other plans, projects and activities. **Where the level of available information regarding a particular project is considered to be insufficient to warrant its***

²³ Natural England 2014. *Development of a generic framework for informing cumulative impact assessments (CIA) related to Marine Protected Areas through evaluation of best practice.* NECR147 <http://publications.naturalengland.org.uk/publication/6341085840277504>.

	<p><i>inclusion within the CIA, the reasoning and justification behind this decision needs to be clearly documented.²⁴</i></p> <p>And also state:</p> <p><i>”Proportionate Cumulative Impact Assessment</i></p> <p><i>The agreed scope for a CIA should be proportionate to the scale of project issues. Although the generic CIA framework has been developed to be applicable for projects of varying scales, the process will still require a certain amount of professional judgement to determine the scope of issues for consideration at the assessment phase. In this way, the focus should be on producing meaningful CIA, which strike a balance between pragmatism and precaution and, therefore, provide a meaningful analysis of the cumulative effects of developments while allowing development to proceed in a timely fashion. It is important to emphasise the need to keep the assessment clearly focused and not unmanageably large. This can only be done as part of close collaboration between developers, regulators and their advisors, who should work together from the early stages of project inception to identify and manage significant issues.”</i></p> <p>It goes on to say:</p> <p><i>“.....should include future projects where there is meaningful information (either to inform a qualitative or quantitative assessment)²⁵</i></p>	
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<p>32) What is your overall impression?</p>	<p>The need to consider cumulative effects in planning and decision making is set out in the National Policy Statements. In the National Policy Statement (NPS) for Ports (NPSP) designated February 2012²⁶:</p> <p>Paragraph 4.2.2 states:</p> <p><i>“Where the decision-maker reaches the view that a proposal for port infrastructure is in accordance with this NPS, it will then have to weigh the suggested benefits, including the contribution that the scheme would make to the national, regional or more local need for the infrastructure, against anticipated adverse impacts, including cumulative impacts.”</i></p> <p>Paragraph 4.7.3 states that:</p> <p><i>“When considering cumulative effects, the ES should provide information on how the effects of the applicant’s proposal would</i></p>	<p>B*/C</p>
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²⁴ Authors emphasis

²⁵ Authors emphasis

²⁶ All NPS are supposed to be reviewed after 5 years

combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence)."

Paragraph 4.7.4 states that the Secretary of State should consider how the:

"accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place."

Advice Note 17²⁷ sets out the Planning Inspectorate's recommended approach for the assessment of cumulative effects. The advice note suggests that applicants agree the list of projects for cumulative assessment with the local authorities and states that "For 'other development' falling into Tier 3²⁸, the applicant should seek to **provide assessment where possible**²⁹, although this may be at a very high level."

It states :

"3.4.10 Where mitigation is proposed to be secured and delivered through a requirement in the draft DCO, or within a Construction Environmental Management Plan (CEMP). Separate consideration may be required of the accumulation or inter-relationship of these effects on an individual set of receptors rather than embedded in the design of the NSIP, the draft requirement should be clearly identified in the mitigation column of the applicant's Matrix 2 and/or as part of an applicant's overarching schedule of mitigation.

3.4.11 As a minimum, applicants are expected to include the mitigation necessary to address impacts associated with their proposed NSIP. However, apportionment of effect and mitigation between the proposed NSIP and 'other development' included in the CEA may be acceptable in certain cases, subject to robust justification and agreement with the relevant statutory consultee and/or other applicant(s).

3.4.12 Where possible, applicants should consider opportunities to develop holistic mitigation strategies in collaboration with other developers identified in the CEA, for example, NPS EN-3 paragraph 2.6.120 advocates the use of shared cable corridors to minimise 'the cumulative effects of multiple cable routescrossing the subtidal zone'. The relevant method by which to secure such mitigation should be agreed by the applicant in

²⁷ Cumulative effects assessment relevant to nationally significant infrastructure projects. Dec 2015. <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf>

²⁸ LTC and TEC are Tier 2 projects now as Scoping Reports were submitted on 2/11/17 and 16/4/18 respectively.

²⁹ IAU emphasis.

consultation with their legal advisors and other relevant bodies.”

Natural England (REP4-008³⁰) and Historic England (REP4-009) have both commented on **Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing: REP3-027** May 2018.

Natural England recognises that there may be constraints, such as the absence of accurate traffic modelling for the Lower Thames Crossing ('LTC'), but considers that this would not undermine a Cumulative Effects Assessment ('CEA') in relation to impacts on terrestrial species (notably invertebrates) or on Special Protection Area ('SPA') species. NE point out the summary in paragraph 4.52³¹ makes it clear that the development at Tilbury2 should not be regarded in isolation, but that it rightly should be considered alongside TEC and LTC, to work collaboratively to achieve a sustainable development solution.

NE notes in their letter of 25 June 2018 at the penultimate paragraph that:

'where practical, the mitigation and enhancements prescribed within the terrestrial ecology chapter will seek to join up with existing or future plans for a landscape scale approach, ' and advise that this should be considered a key measure of the viability of the EMCP.'

NE's position on the draft Ecological Mitigation and Compensation Plan (EMCP) is outlined in its Deadline 5 submission (REP5-061), in particular its concerns over the adequacy of the site layout of the Proposed Development for minimising the impact on the most sensitive ecological areas, and the suitability of the compensation sites.

The Ecological Mitigation and Compensation Plan (EMCP) (REP5-052) states at paragraphs 1.9-1.10 that there are two documents which describe habitat creation works arising from the Tilbury2 project:

"The comparative scope of these two documents is set out below:

- *Ecological Mitigation and Compensation Plan (EMCP). The EMCP deals, as its title suggests, with matters of mitigation (other than embedded design mitigation which has been employed to avoid impacts occurring in the first place, which is best considered as 'avoidance') and compensation. Mitigation includes inter alia the measures that will be taken, under licence*

³⁰ This document is dated 22 May 2018 in the Examination Library but is not the latest written response from NE which is dated 25 June 2018.

³¹ Port of Tilbury London Limited - Qualitative Cumulative Effects Assessment of Tilbury2 with Tilbury Energy Centre and Lower Thames Crossing: REP3-027 May 2018

where necessary and appropriate, to capture and relocate protected species and/or damage or destroy their habitats, or alternatively to prevent the spread of invasive non-native plant species during the disturbance associated with construction activity. Compensation includes the measures that will be taken to provide alternative habitats for species displaced or translocated from the development zones, which in some cases is delivered within the development masterplan, in other cases on adjoining land within the DCO limits, and in still other cases will be delivered at locations that are entirely off-site.

The future management of off-site compensation features is also dealt with in the EMCP.

- *Landscape and Ecological Management Plan (LEMP). The LEMP deals with the management of new on-site landscaping provision and of on-site habitats (and their associated species) within the Order Limits after the measures set out in the EMCP have been implemented, i.e. after the completion of any habitat creation as compensation for losses, and after the completion of species and habitat translocations. However it should be noted that the future management of compensation features off-site is dealt with in the EMCP.*

1.10 Compliance with both the ECMP and the LEMP will be a requirement of the DCO. As such, the Port operator must comply with all measures within both documents. Additional information on the baseline resources that are proposed to be the subject of mitigation and compensation is provided in the project specific Environmental Statement Chapter 10 Terrestrial Ecology (document reference 6.1/APP-031) and associated ES Figures and Appendices.”

The Authors believe that the protected status of all features has been factored in to understanding the potential significance of environmental effects. Similarly, the potential for cumulative and in-combination effects has been adequately evaluated. This recognises the importance of the Thames Estuary as an important resource for both wildlife and a wide range of human activities.

Historic England (HE) states in REP4-009:

”The CEA concludes that the combined magnitude of effects would be medium adverse and the significance of effects will be major. While we concur that the cumulative significance of effects will be major, in line with all our advice on the Tilbury 2 proposals to date, we judge that the residual effect from the proposed development of Tilbury 2 itself would be major, due to the extent and height of built development which impedes the appreciation of the fort’s landscape setting, leading to a degree of harm to its significance which we have judged to be severe. Cumulatively the significance

of effect would continue to be major, but the harm to the significance of Tilbury Fort would be further exacerbated by the additional height and massing of the proposed TEC development within its landscape setting of the fort in views to the east.”

”The CEA landscape character and visual amenity assessment judges that predicted effects would be adverse and would combine with the effects of the Tilbury2 proposals. In landscape and visual terms, the assessment concludes that the size and scale of the of the proposed development may be sufficient to affect the setting of some of the heritage assets and combine with the effects of Tilbury 2 on Tilbury Fort, New Tavern Fort and Coalhouse Fort and the combined developments could affect cultural heritage values associated with these designated heritage assets.”

HE notes that the combined CEA (Section 6.0) unsurprisingly concludes that in most respects the combination of effects on built heritage from Tilbury2, TEC and LTC will be greater than any of the individual projects. However, the individual assessments, on which HE have commented, provide a fuller picture of the likely cumulative effects on the significance of Tilbury Fort, and other heritage assets, notwithstanding the paucity of information currently available.

HE go on to state that the major significant adverse effect, which would occur to the significance of Tilbury Fort’s landscape setting, represents a severe adverse effects to be weighed in the overall balance against the benefits of the proposed development.

In HE’s Deadline 5 submission (REP5-047) HE and the Applicant have agreed on the layout of container stacking to reduce visual impact on the setting of Tilbury Fort and the use of an agreed palette of colours and finishes for structures within the development. While Historic England believes that none of the measures would mitigate the residual effects of the development to a degree that would lead to them agreeing with the applicant’s assessment, they welcome such measures and expect these discussions to continue.

The Authors are satisfied that assessment of effects on built heritage assets is appropriate and follows appropriate guidance issued by Historic England.

The Authors are satisfied that PoTLL generally undertook the correct approach in responding to the Scoping Opinion (APP-033) and that the pre-application consultation and engagement was adequate.

However, LTC and TEC should not have been **”ruled out of the assessment”** but should have been included in a **”long list”**. We would have been content with PoTLL’s decision to not short list the

LTC proposal from the cumulative effects assessment in the ES on the basis of the level of detailed information available at that time. However, PoTLL did not explicitly include LTC and TEC in their "long list" but ruled them out of the assessment for the reasons detailed in paragraphs 2.48-2.63 of the ES.

Tilbury2 DCO application was received by the Planning Inspectorate on behalf of the Secretary of State on **31 October 2017**. TEC and LTC were Tier 3 projects.

On **02 November 2017**, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Highways England (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Lower Thames Crossing (the Proposed Development) and for TEC on **16 April 2018**.

In their Section 51 advice to PoTLL on the 23 November 2017 PINS did state:

" Environmental Statement – Cumulative effects Table 2.2 of the ES identifies projects that have been considered in the cumulative assessment and their locations relative to the Proposed Development are depicted on Figure 11.8. Paragraphs 2.57-2.63 of the ES explain that the proposed Lower Thames Crossing (LTC) is not considered within the cumulative effects assessment because of the limited information available. The Inspectorate notes that subsequent to the application being made for Tilbury2, new information regarding the proposed LTC is now publicly available (including an EIA Scoping Report received by the Inspectorate on 2 November 2017) and should be taken into consideration. The Applicant should provide an assessment of the cumulative effects associated with the proposed LTC. The Inspectorate has established a method for assessing cumulative effects within Advice note 17: Cumulative Effects Assessment. This advises that a cumulative effects assessment is provided for all projects where a scoping report has been submitted (a 'Tier 2' project). The Inspectorate recommends that this approach is adopted."

The Authors agree with PoTLL that it is not appropriate for them to make assumptions about the detail of future projects i.e. LTC and TEC, in such circumstances and particularly for the Transport Assessment. However, PoTLL did make some attempt to address cumulative impacts qualitatively and at a high level for LTC and despite the fact that significant information and data is currently missing or sparse (REP3-027 and the Deadline 5 update). PoTLL has clearly stated that the focus of the CEA was on those LTC and TEC project areas where sufficient relevant information exists e.g. there is currently insufficient relevant information on traffic for any

	<p>quantitative or semi-quantitative transport assessment component of the LTC portion of the CEA.</p> <p>Each environmental topic was qualitatively considered using expert judgement for the cumulative effects of Tilbury2 with the LTC and TEC. The extent to which this was possible was dependent the level of information available across environmental topics. For example, landscape and visual impacts and impacts upon heritage assets will be influenced significantly by detailed design of the scheme and embedded mitigation. If a different conclusion arises once details of those projects come forward, it will be for the promoters of those projects to address their consequential effects. The detailed quantitative assessment of cumulative effects of the LTC and TEC projects with Tilbury2 will necessarily be undertaken by the promoters of the LTC and TEC.</p> <p>The assessment of cumulative effects with other projects has been satisfactorily undertaken largely in line³² with the guidance set out in the Planning Inspectorate Advice Notes 17: Cumulative Effects Assessment (PINS, 2015) and Advice Note 9: Rochdale Envelope (PINS, 2012), which are considered to represent best practice for cumulative effects assessments in relation to DCO projects.</p> <p>The CEA is regarded as generally satisfactory despite some omissions and inadequacies.</p> <p>The Authors are satisfied that the ES, together with the information provided during the course of the Examination, is adequate and meets the requirements under the EIA Regulations and the NPS on Ports.</p>	
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³² A long list was not explicitly tabulated.