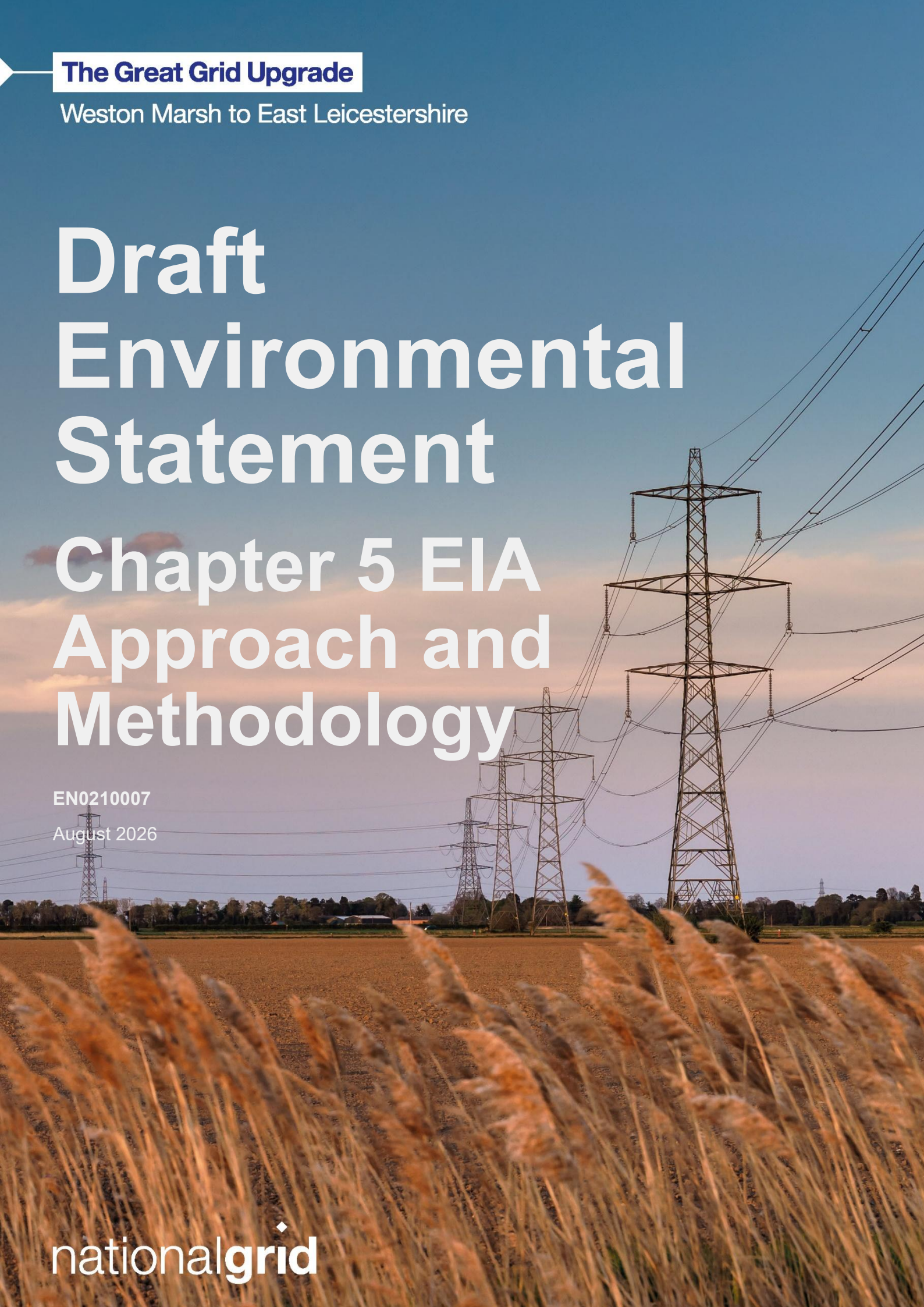




The Great Grid Upgrade

Weston Marsh to East Leicestershire

Draft Environmental Statement

Chapter 5 EIA Approach and Methodology

EN0210007

August 2026

nationalgrid

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5. EIA Approach and Methodology

5.1 Introduction

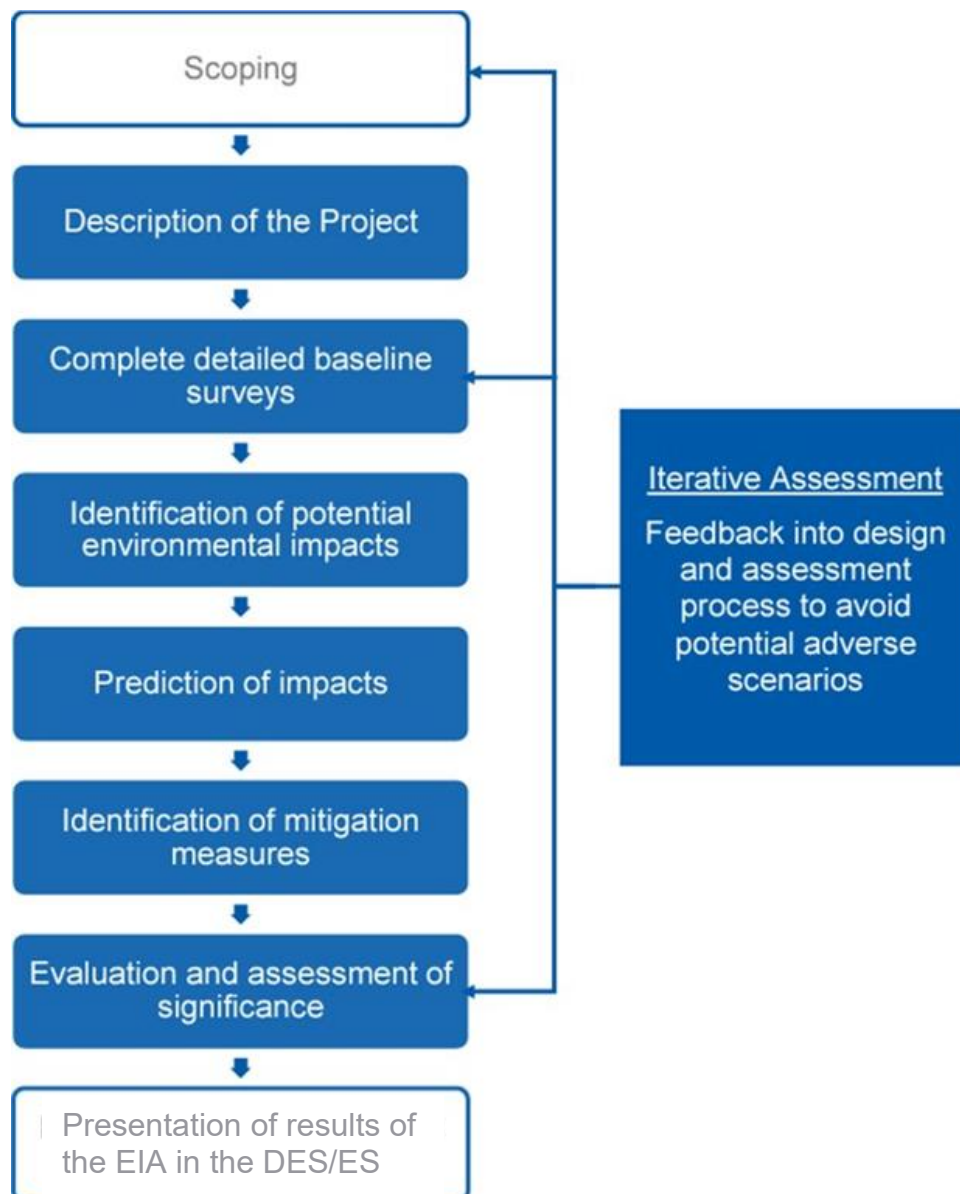
- 5.1.1 This chapter sets out the Environmental Impact Assessment (EIA) approach and general methodology that has been used in developing the preliminary environmental information for the Weston Marsh to East Leicestershire Project (the Project), which is presented in this non-statutory Draft Environmental Statement (DES) (referred to in this document as “DES” and non-statutory DES”).
- 5.1.2 All conclusions and assessments in this DES are by their nature preliminary and are based on the current, early Project design, construction, and baseline information as described within this DES. The full assessment will be presented within the Environmental Statement (ES) submitted with the application for development consent.
- 5.1.3 This chapter should be read in conjunction with the following sections of this DES, which provide further details as to the nature of the Project and the methodologies used in the assessments presented in this DES:
- **Chapter 1 Introduction;**
 - **Chapter 4 Description of the Project;**
 - **Chapter 19 Cumulative Effects;**
 - **Figure 1.1 Project Location Plan;**
 - **Figure 1.2 Draft Order Limits;**
 - **Figure 19.1 Zones of Influence for Cumulative Effects Assessment;**
 - **Appendix 4A Draft Outline Code of Construction Practice (CoCP);**
 - **Appendix 5A EIA Scoping Report;**
 - **Appendix 5B Scoping Opinion;**
 - **Appendix 5C Preliminary Scoping Opinion Response;**
 - **Appendix 19A Preliminary Long List of Other Developments; and**
 - **Appendix 19B Preliminary Short List of Other Developments.**

5.2 Environmental Impact Assessment and Draft Environmental Statement Approach

What is Environmental Impact Assessment?

- 5.2.1 EIA is the process of compiling, evaluating, and presenting information about the likely significant environmental effects, both adverse and beneficial, of a project. The assessment is designed to provide decision makers and statutory consultees with the environmental information they require during determination of an application for development consent. The early detection of likely significant adverse environmental effects enables appropriate mitigation (i.e. measures to avoid, reduce or offset likely significant adverse effects) to be identified and incorporated into the design of a project, or commitments to be made, for example, to environmentally sensitive construction methods and practices.
- 5.2.2 The main stages of the EIA process and the iterative nature of assessment and design are illustrated in **Image 5.1**.

Image 5.1 Environmental Impact Assessment Process



- 5.2.3 The main EIA documents produced in accordance with The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref 5.1) (the EIA Regulations) are the following:
- **Scoping Report:** The EIA Scoping Report identified the scope and level of detail of the information to be provided within the ES. It also set out the likely significant effects anticipated from the Project, the data to be used, and the proposed assessment methodology and approach, and was submitted to the Planning Inspectorate in November 2025. The EIA Scoping Report is provided as **Appendix 5A Scoping Report** to this DES.
 - **Scoping Opinion:** In response to the EIA Scoping Report, the Planning Inspectorate adopted a Scoping Opinion on 17 December 2025 describing where they and other consultees agreed or disagreed with the assessment proposed in the Scoping Report. Before adopting the Scoping Opinion, the Planning Inspectorate on behalf of the Secretary of State, had to consult the consultation bodies. The Scoping Opinion is provided as **Appendix 5B Scoping Opinion** to this DES.
 - **Draft Environmental Statement (DES)** (the current stage of the Project): The DES is produced at a time when there may not be a full understanding of all environmental effects, as the detailed assessments have not yet been undertaken. The DES sets out the level of work undertaken to reach the conclusion as to whether there are likely to be significant effects for each scoped-in aspect. It also outlines any further work that would be presented in the ES to validate these conclusions.
 - **Environmental Statement:** The ES presents the findings of the completed EIA to provide the Planning Inspectorate, consultees, and public an understanding of the likely significant effects of the Project, and inform the examination of the application for development consent. It identifies the likely significant effects that would result if the Project was implemented, and any proposed mitigation to reduce those significant effects. The ES is submitted as part of the application for development consent and is taken into account during the decision-making process.
- 5.2.4 To secure environmental mitigation that is required for the Project, as identified within the ES, an Outline Code of Construction Practice (CoCP) will accompany the application for development consent. The Outline CoCP will include outline or draft Environmental Control Plans (ECPs) or requirements that the appointed contractor develops relevant plans. The Final CoCP and related plans would be developed by the contractor and be implemented during the construction of the Project. The ECPs will detail further aspect-specific environmental measures to avoid or reduce any detrimental effects on the environment, for example the Material and Waste Management Plan (MWMP), which details how materials will be managed efficiently during construction.

- 5.2.5 It should be noted that the Outline ECPs are not submitted as part of this DES, but will either be provided as part of the ES and application for development consent, or appropriate requirement will be secured to ensure that they are developed at the appropriate time. The draft development consent order (DCO) submitted as part of the application for development consent will secure these documents as a requirement, whereby they must be complied with during the relevant future stages of the Project that they apply to, such as construction and operation. The anticipated ECPs are described in **Table 5.1**.

Table 5.1 Environmental Control Plans

Plan	Description
Construction Environmental Management Plan (CEMP)	Details how to mitigate and manage the identified environmental impacts during the construction of the Project.
Landscape and Ecology Management Plan (LEMP)	Details how habitats and other ecological enhancements will be managed and maintained throughout the Project lifecycle. Appendix 6C Draft Outline Landscape and Ecology Management Plan provides a draft of this document.
Material and Waste Management Plan (MWMP)	Details how materials will be managed efficiently and disposed of legally during the construction of the Project. Appendix 4B Draft Outline Material and Waste Management Plan provides a draft of this document.
Construction Traffic Management Plan (CTMP)	Details the environmental and traffic control measures which may be implemented in relation to the traffic generated during the construction phase of the Project. Appendix 13D Draft Outline Construction Traffic Management Plan provides a draft of this document.
Public Rights of Way Management Plan (PRoWMP)	Details management and environmental measures strategy for all Public Rights of Way (PRoWs) and Open Access Land affected by the Project. Appendix 16A Draft Outline Public Rights of Way Management Plan provides a draft of this document.
Overarching Written Scheme of Investigation (WSI)	Details required measures to mitigate direct adverse impacts to the historic environment.
Soil Management Plan (SMP)	Details management measures to minimise adverse effects on the soil resource.

- 5.2.6 For the purposes of this DES a Draft Outline CoCP has been prepared in parallel with the preliminary design – see **Appendix 4A Draft Outline CoCP**. The Draft Outline CoCP includes the preliminary control and management measures which have been identified within this DES. It also sets the foundation which the Outline and Final CoCP will follow.

DES Approach Overview

- 5.2.7 This DES was originally prepared having regard to the now revoked Regulation 12 of the EIA Regulations, which prior to 24 July 2026 required a DCO applicant to publicise and consult on preliminary environmental information, defined as information being ‘....*reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*’ (Ref 5.1).
- 5.2.8 This DES provides a preliminary assessment of likely significant effects for each environmental aspect. Each aspect chapter within this DES outlines methodology, baseline, mitigation and residual effects (including a prediction of likely significant effects) informed by the EIA Scoping Report and Scoping Opinion, initial and ongoing engagement with consultees, and environmental information collected to date.
- 5.2.9 This DES follows a receptor-based assessment approach (unless otherwise stated in each chapter). A receptor is a component of the natural or man-made environment, such as water or a building, that is affected by an impact such as dust, noise or construction activities. When deciding on which receptors to include within the DES, consideration was given to Regulation 5(2), Schedule 4 paragraph 4 of the EIA Regulations (Ref 5.1); and the Scoping Opinion.
- 5.2.10 Any likely significant effects within this DES are preliminary and are based on the Project design and assumptions described within this DES. All assessment work has and continues to apply a precautionary principle, in that where limited information is available, a realistic worst-case scenario is assessed.
- 5.2.11 The DES sets out the level of work undertaken to reach the conclusion as to whether there are likely to be significant effects for each scoped-in aspect. It also outlines any further work to be presented in the ES to validate conclusions.

5.3 The ‘Rochdale Envelope’, Limits of Deviation, and Uncertainty

- 5.3.1 Major infrastructure schemes such as linear infrastructure projects for overhead lines, typically need some flexibility to be maintained for detailed design and construction, to provide for conditions that would otherwise prevent or delay construction or to respond to changes in circumstance. Examples can include previously unknown archaeological assets which interact with the location of proposed towers or the emergence of changed technology or technical requirements.
- 5.3.2 In addition to this, flexibility is likely to be required for non-linear aspects of the Project, for example the layout of substations. A flexible approach to design parameters is therefore used to ensure the maximum dimensions and potential locations of infrastructure and compounds are considered, and this is typically referred to as the ‘Rochdale Envelope’.

- 5.3.3 Planning Inspectorate Pre-application Advice on Environmental Impact Assessment (Ref 5.2) provides guidance on how to deal with flexibility of this type as follows: *‘The Rochdale Envelope assessment approach is an acknowledged way of assessing a proposed development comprising EIA development where uncertainty exists and necessary flexibility is sought.’*
- 5.3.4 To accommodate the necessary flexibility, a spatial, technical and temporal tolerance has been applied to the relevant works. The extent of this tolerance is known as the ‘Limits of Deviation’ (LoD). The LoDs ensure that the parameters for the Rochdale Envelope approach include the maximum extent in respect of proposed works, and therefore the reasonable worst case can be considered in assessments. Other flexibilities may be required, for example where options are still under consideration, but in each case they would be subject to the same constraints such as measures in the CoCP, requirements of the DCO, and/or the Order Limits. Those constraints, such as hours of working, can also provide parameters for the Rochdale Envelope.
- 5.3.5 As acknowledged by the Planning Inspectorate’s Pre-application Advice on Environmental Impact Assessment (Ref 5.2), this approach allows for a realistic worst-case assessment to be undertaken and is the basis for the preliminary assessment reported within this DES. By developing a realistic worst-case scenario, it is possible to strike a balance between the level of design information needed for the purpose of EIA and the application for consent, while still retaining a level of design flexibility needed as the Project moves into detailed design and construction.
- 5.3.6 At this stage only preliminary environmental information is being provided, as the design of the Project, and the LoDs and Order Limits to be applied for, have not been finalised. However, the principles and assumptions that are currently envisaged to be applied in respect of the LoD (which are considered within this DES), are detailed within **Chapter 4 Description of the Project**.
- 5.3.7 Pre-application Advice on Environmental Impact Assessment (Ref 5.2) also considers flexibility and uncertainty in the characteristics of a proposed development and suggests they are clearly identified in the description of the development in the ES. As the design and delivery of infrastructure in the Great Grid Programme develops, different construction techniques and access strategies, and various combinations of them, are being considered, developed and tested. The final approach employed is dependent on many factors such as access, the local and strategic highway network, ground conditions, supply chain availability of staff, equipment and materials. Therefore, some flexibility is sought in the potential access strategy for the Project and potential options are described in Section 4.5 of **Chapter 4 Description of the Project**. At this stage, each aspect chapter has qualitatively considered these alternatives to ensure that the potential realistic worst case has been considered in this assessment and ongoing design development. The conclusions are reported separately at the end of the Preliminary Assessment of Effects Section of each aspect chapter.

5.4 Draft Environmental Statement Assessment Approach

- 5.4.1 The following describes the methodology used to assess the potential effects on the natural, human and built environment as a result of the Project. In accordance with the EIA Regulations (Ref 5.1), the assessments undertaken evaluate and identify the likely significant effects arising from the proposed construction, operation and maintenance of the Project.

- 5.4.2 The scope of the assessment is based on that which was presented within the Scoping Report and reflects, where appropriate, responses provided in the Scoping Opinion, taking into account the stage reached in the EIA process at the time of writing. Where the Planning Inspectorate has identified that aspects and/or matters should be discussed with consultees and included in the scope of the ES, these have been included within the assessment presented in this DES and/or will be included within the ES. **Appendix 5C Preliminary Scoping Opinion Response** summarises the key points raised within the Scoping Opinion and provides the current approach National Grid has or intends to employ to address the points raised.

Technical Scope

- 5.4.3 The technical scope of assessment for each environmental aspect is detailed in aspect **Chapters 6-18**. These chapters also detail the approach to baseline data collection, assessment guidance and methodologies as well as any assessment assumptions and limitations. This is the basis for the assessments presented in this DES.

Spatial Scope

- 5.4.4 The spatial scope for each environmental aspect is the geographical area over which significant effects on the environment could potentially occur as a result of the Project.
- 5.4.5 Each environmental aspect chapter applies a buffer around the draft Order Limits to determine the extent of the assessment, collectively known as the Study Area. The Study Area proposed for each environmental aspect comprises an area sufficient to encompass the spatial extent over which impacts relevant to that environmental aspect and the related receptors may occur.
- 5.4.6 The spatial scope for each environmental aspect depends on the nature of the potential effects and the location of receptors that could be affected. The spatial scope takes account of:
- the extent and location of the Project;
 - the nature of the baseline environment;
 - the manner and extent to which environmental effects may occur; and
 - relevant guidance, best practice and/or legislation.
- 5.4.7 It should be noted that the spatial scope may be refined within the ES following Stage 2 Consultation.
- 5.4.8 The Planning Inspectorate published a first Transboundary screening on 11 March 2026 (Ref 5.3) which concluded that the Project is not likely to have a significant effect on the environment in a European Economic Area State, therefore, transboundary effects are not considered further in this assessment.

Temporal Scope

- 5.4.9 The temporal scope refers to the time periods over which impacts and effects may be experienced by identified receptors.
- 5.4.10 Should the application be successful, construction works are expected to start in 2030 and would be completed by 2035.

- 5.4.11 The EIA will predict the changes (impacts) to the current and future baseline during the construction and operation phases of the Project, and the consequence (effect). The general approach is summarised below and any variations from this are discussed in the relevant aspect chapters:
- **Baseline year:** the baseline is the reference period for the environmental conditions without implementation of the Project, against which the potential effects of the Project are assessed. The baseline year for this DES is 2026, and will be updated for the ES to when the majority of baseline surveys are to take place, across 2026 and 2027.
 - **Future Baseline:** for certain environmental aspects the baseline environment is expected to change over time in the absence of the Project. This change could arise by virtue of natural processes and as a result of human influence through changes in land use, management or development and climate change. For these environmental aspects, this change has been predicted to enable robust identification of the effects of the Project against a 'future baseline', which is predicted to be present at the time the assessment requires.
 - **Construction Phase:** these are effects that are likely to occur during the construction phase of the Project. These will include effects resulting from the activities associated with site preparation and installation of the new overhead line and substations, and works to facilitate the connection of the overhead line into the substations and reconductoring of the existing overhead line. It also includes effects associated with the temporary works such as access tracks, haul roads, construction compound areas and work activities.
 - **Operational phase:** these are effects that will potentially occur as a result of the presence, operation and maintenance of the Project.
- 5.4.12 The EIA will use defined temporal scales to characterise the duration of potential effects. For the purposes of the preliminary assessment, the following definitions have been applied (unless defined differently in the specific aspect chapters to remain consistent with recognised assessment methodologies):
- **Permanent** – these are effects that will remain even when the Project is complete, although these effects may be caused by environmental changes that are permanent or temporary.
 - **Temporary** – these are effects that are related to environmental changes associated with a particular activity and that will cease when that activity finishes.
- 5.4.13 The temporal nature of effects may be different to the phase in which the effects occur. For example, effects as a result of vegetation clearance during construction may be felt for several years after construction has been completed, before any replanted habitats have matured. For the purposes of the EIA, the effects are described under the phase within which the impact arises, (i.e. in the above example, vegetation loss assessed for the construction phase) and the conclusions will take into account the duration of the impact.

Design, Standard and Additional Mitigation Measures

- 5.4.14 A number of measures would be adopted as part of the Project to avoid and reduce the likely significant effects that would be experienced during implementation. Each environmental aspect chapter of the DES has identified proposed mitigation measures that are required to avoid or reduce the likely significant adverse effects of the Project. These fall into one of three categories below.

- **Design mitigation measures** are those that are intrinsic to and built into the design. Design measures may include, for example, working within the existing topography to reduce tower visibility, and reducing habitat loss by minimising land take. They can also include the avoidance of designated sites or valuable habitats through sensitive routeing, siting and design. Any such measures are described in each environmental aspect chapter and **Chapter 4 Description of the Project**.
- **Standard (or good practice) mitigation measures** are those which would be implemented on a project of this scale and/or nature, regardless of being subject to statutory assessment. These can therefore be assumed as implemented in the assessment, for example, the production of a Construction Environment Management Plan (CEMP) to minimise impacts on air quality, noise and waste. Any relevant measures are described in each environmental aspect chapter as well as **Appendix 4A Draft Outline Code of Construction Practice**.
- **Additional mitigation measures** comprise measures over and above any embedded and good practice/standard mitigation measures, for which the EIA has identified a requirement to further reduce significant environmental effects, for example, landscape planting. Any additional measures have been described in each environmental aspect chapter.

5.4.15 All three categories of mitigation will be secured by an appropriate mechanism including ‘requirements’ which are provisions in the DCO that will make the mitigation mandatory, so that there will be a legal requirement to implement them. As such, no assessment of likely significant effects has been undertaken prior to the application of mitigation, as all mitigation will be a legal requirement.

5.4.16 Environmental enhancements are measures incorporated into the design or secured by the DCO which are over and above those that are required to mitigate the potential adverse environmental effects of the Project. The aim of environmental enhancements is to improve environmental factors within the Project beyond the pre-development state. Any opportunities for environmental enhancement over and above the required mitigation measures (if identified) and Biodiversity Net Gain (BNG) (a separate regulatory requirement to the EIA Regulations) will be outlined within the ES.

5.5 Assessment of Effects and Determination of Significance

5.5.1 Regulation 5(2) of the EIA Regulations (Ref 5.1) states that:

‘The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors –

(a) population and human health,

(b) biodiversity [...];

(c) land, soil, water, air and climate;

(d) material assets, cultural heritage and the landscape;

(e) the interaction between the factors referred to in sub-paragraphs (a) to (d).’

- 5.5.2 Schedule 4 paragraph 5 of the EIA Regulations (Ref 5.1) requires a description of the likely significant effects of the development on the environment. The assessment of the significance of effects for the majority of aspects will be based on the steps set out in the below paragraphs. The approach outlined here provides an example of the typical assessment process to aid understanding and is not necessarily followed by each aspect assessment. The specific methodology, criteria and terminology employed for each assessment are provided in that chapter.

Identification of Potential Effects

- 5.5.3 The likely significant effects (beneficial and adverse) of the Project will be predicted and evaluated using appropriate evaluative techniques, many of which follow specific and best practice guidelines for a particular aspect. Potential effects will be identified first, usually in summary, as an indication of what effects could theoretically occur in the absence of mitigation (other than mitigation inherent in the design of the Project).

Assessing Effects and Determining Residual Significance

- 5.5.4 There is no statutory definition of what constitutes a 'significant' effect within the EIA Regulations (Ref 5.1) and whilst the determination of the significance of effects is important to informing the decision-making process, defining what is significant is not a simple task. The process typically involves consideration of two elements of a potential effect, namely the sensitivity and/or value of the receptor or resource, and the magnitude of the impact on the receptor/resource.

- 5.5.5 The significance of the residual effects (those that are predicted to remain after the environmental mitigation measures have been implemented) have been determined by reference to criteria for each assessment aspect. Specific significance criteria for each technical discipline gives due regard to the following:

- scale of impact;
- duration of impact, and whether effects are temporary, reversable, or permanent;
- nature of impact (whether direct or indirect, reversible or irreversible, beneficial or adverse);
- whether the effect occurs in isolation, is cumulative, or will interact with other effects;
- performance against any relevant environmental quality standards;
- sensitivity of the receptor; and
- compatibility with environmental policies.

- 5.5.6 Each environmental aspect chapter of this DES includes a description of the approach taken to determine the significance of effects, including how professional judgement may be applied. The environmental aspect chapters use the terminology for magnitude, sensitivity and significance described in the following sections unless there is a need to deviate due to topic-specific guidance being available, and widely accepted best practice across the industry. Where there is a requirement to deviate, this justification is provided within the environmental aspect chapter.

Magnitude of impact

5.5.7 Examples of general criteria for defining the magnitude of an impact or change are set out in **Table 5.2**. Key factors that influence this include the following:

- **Scale of change** – refers to the degree of change to or from the baseline environment caused by the impact being described.
- **Spatial extent** – is the full area over which the impact occurs.
- **Duration and frequency** – the duration is a measure of how long the impact is expected to last. Frequency refers to how often the impact would occur, for example, it may be continuous or periodic.

Table 5.2 Impact magnitude criteria

Magnitude	General Criteria
Large	Adverse: Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features, or elements. Beneficial: Large scale or substantial improvement of resource, including extensive restoration or major improvement of attribute quality.
Medium	Adverse: Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements. Beneficial: Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Small	Adverse: Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one or more key characteristics, features or elements. Beneficial: Minor benefit to, or addition of, one or more key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse: Very minor loss of detrimental alteration to one or more characteristics, features or elements. Beneficial: Very minor benefit to or positive addition of one or more characteristics, features or elements.
No change	No adverse or beneficial change from baseline conditions.

Sensitivity and value of the receptor

5.5.8 The sensitivity of a receptor or feature is characterised by its vulnerability to, and its ability to accommodate and/or recover from change. The value of a receptor or feature reflects its overall importance and the value placed on it by society; this may be reflected by its level of statutory or policy protection, or else a value may be attributed through consultation and the application of professional judgement. Generic, example criteria for defining the sensitivity and/or value of a receptor are set out in **Table 5.3**. Characterisation of the receptor is achieved by balancing these considerations to determine the receptor's sensitivity:

- **Vulnerability** – the vulnerability of the receptor relates to its capacity to accommodate change, i.e. the tolerance/intolerance of the receptor to change.
- **Recoverability** – the ability of the receptor to return to the baseline state.

- **Importance** – the importance of the receptor or feature is a measure of the value assigned to that receptor based on biodiversity and ecosystem services, social value and economic value. Importance of the receptor can also be defined within a geographical context, whether it is important internationally, nationally or locally.

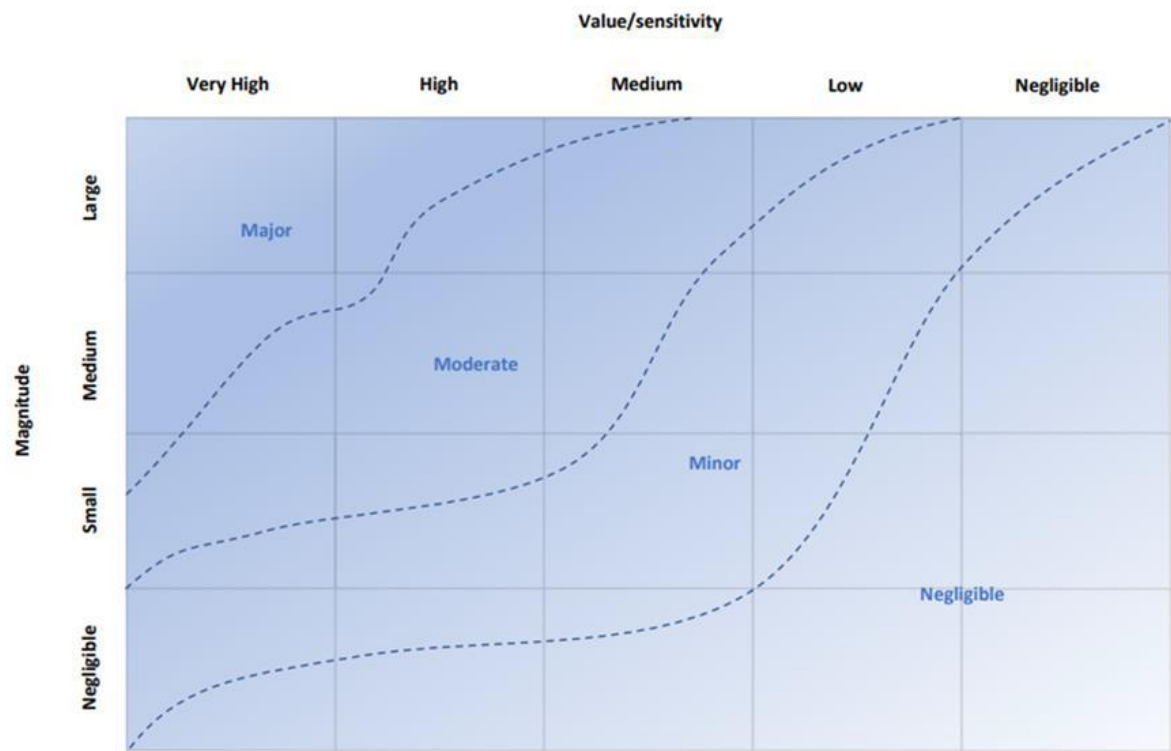
Table 5.3 Value and sensitivity criteria

Value/Sensitivity	General Criteria
Very high	Very high importance and rarity, and/or value at an international level. The receptor has limited potential for recovery or substitution and has little to no capacity to accommodate change. As such, the receptor would have a higher vulnerability.
High	High importance and rarity, and/or value at a national level. The receptor has limited potential for recovery or substitution and has little capacity to accommodate change.
Medium	Medium importance and rarity, and/or value at regional level. The receptor is not particularly sensitive to change or has the capacity to accommodate change. As such, the receptor would have a lower vulnerability.
Low	Low importance and rarity, value at local level. The receptor is not particularly sensitive to change, or has the capacity to accommodate change. As such, the receptor would have lower vulnerability.
Negligible	Not considered as important and is considered to be easy to replace and as such, is deemed to have the lowest vulnerability.

Evaluating the significance of effects

- 5.5.9 Having established the magnitude of impact and value/sensitivity of the receptor, the significance of an effect, then the consequence of the identified impact on the receptor, can be assessed. To aid transparency in the assessment process, the matrix shown in **Image 5.2** provides an example basis for assigning significance to an effect; however, the identification of significance typically requires the application of professional judgement. As an illustration, a high sensitivity receptor subject to a large magnitude of impact would experience a major or (in some circumstances) moderate effect, and a low sensitivity receptor subject to a small magnitude of impact would experience a minor or negligible effect, dependent on the circumstances.
- 5.5.10 Each of the specialist disciplines will apply magnitude and sensitivity criteria that best suit the aspect area, and for some aspects these may be defined in industry guidelines.

Image 5.2 Basis of assigning significance



5.5.11 Following the classification of an effect using the methodology, a clear statement will then be made as to whether that effect is **significant** or **not significant**. Major and moderate effects are typically considered to be **significant**, whereas minor and negligible effects are typically considered to be **not significant**. However, professional judgement will also be applied in reaching conclusions as to the significance of effects. Typical definitions for the classification of effects are shown in **Table 5.4**.

Table 5.4 Classification of effects

Significance	General Criteria	Significant Effect
Major	A large and detrimental change to a valuable/sensitive receptor commonly resulting in the loss of the receptor and/or a large change in its quality and integrity, key features or elements. A large and beneficial change, resulting in improvements to the baseline or a major contribution being made to national targets. These effects may represent key factors in the determination of the application for development consent. Potentially associated with sites and features of international and national importance, or likely to be important considerations at a regional or district scale. Major effects may relate to resources or features that are unique and which, if lost, cannot be replaced or relocated.	Yes

Significance	General Criteria	Significant Effect
Moderate	A medium-scale change which may not result in the total loss of a receptor but is still considered to be generally material to planning decisions, and considered in balance with other significant positive benefits of a project. A positive moderate effect is a medium-scale change that is significant in that the baseline conditions are improved to the extent that guideline targets (e.g. UK Biodiversity Action Plan targets) are contributed to. These effects, if adverse, are likely to be important at a regional scale and on their own could have a material influence on decision making.	Yes (typically)
Minor	A small change in key features or elements where a partial loss of the receptor may be evident. A small positive change, but not one that is likely to be a key factor in the overall balance of issues. These effects may be raised as local issues and may be of relevance in the detailed design of a project but are unlikely to be critical in the decision-making process.	No
Negligible	A very small change that is so unimportant that it can typically be disregarded. Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error. These effects are unlikely to influence decision making, irrespective of other effects.	No

Residual effects

- 5.5.12 Residual effects are those that are predicted to remain after both the control and management measures and environmental mitigation measures have been implemented. These will be described at the end of each environmental aspect chapter within this DES.

5.6 Cumulative Effects

- 5.6.1 Schedule 4 of the EIA Regulations (Ref 5.1) states that an ES is to include a description of the likely significant effects of a development on the environment, which should cover, amongst others, cumulative effects. Paragraph 5(e) describes these as: *‘the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources’*.
- 5.6.2 In addition, Regulation 5(2)(e) of the EIA Regulations requires that the EIA considers the interaction of environmental effects associated with the Project. The interrelated effects assessment considers likely significant effects from multiple impacts and activities from the construction and operation of the Project on the same receptor, or group of receptors.

- 5.6.3 National Policy Statement (NPS) EN-1 (Ref 5.5) states at paragraph 4.3.3 that *‘The Regulations require an assessment of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, transboundary, short, medium and long-term, permanent and temporary, positive and negative effects at all stages of the project.’*
- 5.6.4 NPS EN-5 (Ref 5.6) provides environmental topic-specific guidance for electrical infrastructure including overhead line but makes only limited reference to cumulative considerations. Paragraph 2.9.10 states that *‘Cumulative adverse landscape, seascape and visual impacts may arise where new overhead lines are required along with other related developments such as substations, wind farms and/or other new sources of generation.’*
- 5.6.5 Paragraph 116 of the National Planning Policy Framework (NPPF) (Ref 5.7) states that *‘Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.’* Paragraph 198 states that *‘Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.’* Paragraph 199 states that *‘Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas.’*
- 5.6.6 There is currently no standard methodology for an assessment of in-combination effects or a Cumulative Effects Assessment (CEA), however, there is a range of public sector and industry-led guidance available.
- 5.6.7 The Planning Inspectorate’s Guidance: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Ref 5.4) provides advice regarding a staged approach for documenting the CEA within an ES, relevant to Nationally Significant Infrastructure Projects (NSIPs). The guidance highlights the need to consider the potential for cumulative effects arising due to the interactions between different components of the development, as well as with other existing development and/or approved development. This guidance defines ‘other existing and/or approved’ development as including those submitted into planning regimes but not yet determined and other plans and programmes, which goes beyond ‘existing or approved’, accepting that there is greater uncertainty that these development types will be delivered and less information on them and their potential effects available.
- 5.6.8 The assessment of cumulative effects will be based on publicly available data relating to proposed and committed developments as set out in the Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Ref 5.4) which are in the public domain or have been provided to the Project team. As far as possible, the Project team will collaborate with other developers and relevant statutory consultees, to identify information which may be pertinent to the assessment of cumulative effects.
- 5.6.9 The CEA undertaken so far is described in **Chapter 19 Cumulative Effects** of this DES which describes the methodology employed, interactions considered, the long and short lists of other development, and preliminary findings.

5.7 Monitoring

- 5.7.1 Schedule 4, Paragraph 7 of the EIA Regulations (Ref 5.1) is clear that, where appropriate, the ES should include a description of any proposed monitoring arrangements where likely significant effects have been identified, and mitigation proposed. This is to allow the confirmation and evidence of the effectiveness of the implemented Project and mitigation to be evaluated, and/or to validate assessment conclusions. The monitoring of significant effects requirements would be detailed within the ES aspect chapters to include clear and proportionate objectives for monitoring, the parameters to be monitored, the methodology for the monitoring, a timescale for implementation, identification of the party who would be responsible for the monitoring, and an outline of the remedial actions to be undertaken should results be adverse.

5.8 Environmental Aspects

- 5.8.1 **Table 5.5** outlines the aspects of the environment that will be considered within the ES and that have been considered within this DES together with how they relate to the relevant description of the environment identified in accordance with the EIA Regulations (Ref 5.1).
- 5.8.2 The EIA focuses on effects of identified impacts on receptors where significant effects are likely. This enables a proportionate approach to assessment, ensuring that time and effort during the preparation and determination of the application is directed towards those effects that are significant, rather than on detailed analysis of all potential impacts, many of which would not be significant. The main receptors are people and local communities, biodiversity, land use and land quality, landscape and views, and surface and groundwater resources.

Table 5.5 Aspects that will be considered in the ES

Environmental Factors to be Considered (EIA Regulations, Regulation 5(2), and Schedule 4)	Aspect Chapter
Population and human health	Health and Wellbeing Traffic and Transport Socio-economics, Recreation and Tourism
Biodiversity (flora and fauna)	Ecology and Biodiversity
Land (for example, land take)	Agriculture and Soils Geology and Hydrogeology
Soil (for example, organic matter, erosion, compaction, sealing)	Geology and Hydrogeology Agriculture and Soils
Water (for example, hydromorphological changes, quantity, and quality)	Water Environment
Air	Air Quality
Climate (for example, greenhouse gas emissions, impacts relevant to adaptation) and vulnerability of the Project to climate change	Climate Change considers greenhouse gases. The resilience of proposed infrastructure to climate change has been adopted into design standards that need to be met in the engineering design. Resilience and vulnerability of the Project to climate change is therefore an inherent part of the Project that would be consented.
Material assets	This aspect is concerned with the interference of the Project with other infrastructure, including utilities, highways, and rail. The mitigation is to avoid the need for crossings and where this is unavoidable, to agree to the form of crossing or divert utilities with the statutory undertaker or private enterprise. This is a construction engineering issue and is addressed as part of the description of the Project.
Cultural heritage (including architectural and archaeological aspects)	Cultural Heritage
Landscape	Landscape Visual
The interaction between the factors listed above	Cumulative Effects
The expected significant effects arising from the vulnerability of the Project to major	All potential effects were scoped out from further assessment, as there are no likely significant effects, as agreed in the Scoping

Environmental Factors to be Considered (EIA Regulations, Regulation 5(2), and Schedule 4)	Aspect Chapter
accidents or disasters that are relevant to that development.	Opinion. A standalone major accident and/or disasters chapter is therefore not required. Where appropriate, relevant environmental aspects would identify the likely risks to the Project in relation to potential areas of vulnerability. For example, any flood risk concerns are considered within Chapter 10 Water Environment and would be addressed as part of the Flood Risk Assessment submitted with the ES.

5.8.3 The technical aspect chapters presented in this DES are:

- Chapter 6 Landscape;
- Chapter 7 Visual;
- Chapter 8 Ecology and Biodiversity;
- Chapter 9 Cultural Heritage;
- Chapter 10 Water Environment;
- Chapter 11 Geology and Hydrogeology;
- Chapter 12 Agriculture and Soils;
- Chapter 13 Traffic and Transport;
- Chapter 14 Air Quality;
- Chapter 15 Noise and Vibration;
- Chapter 16 Socio-economics, Recreation and Tourism;
- Chapter 17 Health and Wellbeing;
- Chapter 18 Climate Change; and
- Chapter 19 Cumulative Effects.

References

- Ref 5.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 [online]. Available at: <https://www.legislation.gov.uk/uksi/2017/572/contents/made> [Accessed 25 November 2025].
- Ref 5.2 Planning Inspectorate (2026). Nationally Significant Infrastructure Projects: Pre-Application Advice on Environmental Impact Assessment [online] Available at: <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-pre-application-advice-on-environmental-impact-assessment> [Accessed: 30 July 2026].
- Ref 5.3 Planning Inspectorate (2026). Transboundary Screening [online]. Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0210007-000033-WMEL%20-%20Regulation%2032%20Transboundary%20Screening%20document.pdf> [Accessed: 08 June 2026].
- Ref 5.4 Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. [online] Available at: <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment#legal-and-policy-requirements-for-cumulative-effects-assessment> [Accessed: 26 November 2025].
- Ref 5.5 Department for Energy Security & Net Zero (2025). Overarching National Policy Statement for Energy (EN-1) [online]. Available at: <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1-2025> [Accessed 19 January 2026].
- Ref 5.6 Department for Energy Security & Net Zero (2025). National Policy Statement for Electricity Networks Infrastructure (EN-5) [online]. Available at: <https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5-2025> [Accessed 19 January 2026].
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