



# HIGH SPEED TWO PHASE ONE INFORMATION PAPER

## E2: ECOLOGICAL IMPACT

This paper outlines how ecological impacts have been assessed and how they will be mitigated or compensated for during the construction of Phase One of High Speed 2.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the Bill for Phase One of the scheme which is now enacted. Although the contents were maintained and updated as considered appropriate during the passage of the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

**The Helpdesk can be reached at:**

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# E2: ECOLOGICAL IMPACT

## 1. Introduction

- 1.1. High Speed Two (HS2) is the Government's proposal for a new, high speed north-south railway. The proposal is being taken forward in two phases: Phase One will connect London with Birmingham and the West Midlands and Phase Two will extend the route to Manchester, Leeds and beyond.
- 1.2. HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.
- 1.3. In November 2013, HS2 Ltd deposited a hybrid Bill<sup>1</sup> with Parliament to seek powers for the construction and operation of Phase One of HS2 (sometimes referred to as 'the Proposed Scheme'). The Bill is the culmination of nearly six years of work, including an Environmental Impact Assessment (EIA), the results of which were reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.4. The Bill is being promoted through Parliament by the Secretary of State for Transport (the 'Promoter'). The Secretary of State will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill.
- 1.5. This body is known as the 'nominated undertaker'. There may well be more than one nominated undertaker – for example, HS2 Ltd could become the nominated undertaker for the main railway works, while Network Rail could become the nominated undertaker for works to an existing station such as Euston. But whoever they are, all nominated undertakers will be bound by the obligations contained in the Bill and the policies established in the EMRs.
- 1.6. These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the project have been reached.

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<sup>1</sup>The High Speed Rail (London – West Midlands) Bill, hereafter 'the Bill'.

## 2. Overview

- 2.1. This information paper outlines how ecological impacts have been assessed and how they will be mitigated or compensated for during the construction of the Proposed Scheme.

## 3. No net loss to biodiversity

- 3.1. The Proposed Scheme has the objective of seeking to ensure no net loss to Biodiversity. To measure losses and gains of habitats an adapted version of the Department for Environment, Food and Rural Affairs (Defra) Biodiversity Offsetting metric was developed in consultation with Defra and Natural England. It will be used to compare the biodiversity value of the habitats created and the habitats lost. Details of the methodology and metric are set out in the Scope and Methodology Report (SMR) addendum (volume 5 Appendix CT-001-000/2) of the Environmental Statement (ES) submitted with the Bill. It is intended that the metric will be re-run at appropriate intervals throughout the course of the project to demonstrate progress towards this objective
- 3.2. In order to satisfy the licencing requirements noted in the impact assessment section below and to underpin the outcome of the biodiversity loss and gain calculation, habitats created for mitigation/compensation will need to be managed appropriately. The Environmental Memorandum contains a commitment to ensuring appropriate management by the Promoter and the nominated undertaker.

## 4. Mitigation and compensation

- 4.1. In support of this objective the Proposed Scheme includes a range of mitigation and compensation measures. The Proposed Scheme will not affect any internationally designated sites, however three nationally important Sites of Special Scientific Interest (SSSIs) will be affected. These are the Mid Colne Valley SSSI, the Helmdon Disused Railway SSSI and Frays Farm Meadows SSSI. One Local Nature Reserve is also affected. For these sites mitigation measures have been developed on a site specific basis in consultation with Natural England.
- 4.2. There are also 91 non-statutory Local Wildlife Sites where there will be a direct loss of habitat. Mitigation for these sites has been developed in consultation with nature conservation Non-Government Organisations (NGOs) such as the local wildlife trusts.
- 4.3. The Proposed Scheme will result in loss of 30.4ha of ancient woodland at 32 sites. To compensate for the loss of ancient woodland the nominated undertaker will use best practice measures such as re-using the ancient woodland soils and creating new mixed deciduous woodland. However, it is acknowledged that it is not possible to replace ancient woodland. Ancient woodland losses and associated compensation will be documented in an ancient woodland strategy in early 2017.

- 4.4. The Bill identifies those areas of habitat creation that will be required to maintain the populations of protected species. In addition to woodland, new areas of habitat such as grassland, heathland and ponds will be created for this purpose.
- 4.5. Protected species that could potentially be affected by the Proposed Scheme include a number of bat species (including the Bechstein's bat and Barbastelle bat), great crested newts, otters, white-clawed crayfish and badgers. Birds that could potentially be affected by the construction and operation of the Proposed Scheme include barn owls. Mitigation in the Proposed Scheme includes measures such as habitat creation to link isolated areas of existing habitat, and the provision of underpasses or green bridges to help maintain movement of species in the landscape post-construction. These measures also support climate change requirements by allowing species to move more freely in response to changing climatic conditions.

## 5. Ensuring outcomes

- 5.1. The draft Code of Construction Practice (CoCP) requires the nominated undertaker to ensure that procedures are implemented to control and limit disturbance to areas of nature conservation interest and protected species in accordance with relevant legislative requirements and accepted industry practice.
- 5.2. The nominated undertaker will ensure compliance with the relevant statutory provisions in respect of the protection of areas of nature conservation interest and of protected species. Relevant provisions (at time of writing) include the following:
  - Wildlife and Countryside Act 1981 (as amended);
  - The Conservation of Habitats and Species Regulations 2010 (as amended);
  - Natural Environment and Rural Communities Act 2006
  - Countryside and Rights of Way Act 2000;
  - Weeds Act 1959; and
  - Protection of Badgers Act 1992.
- 5.3. This includes demonstration by the Promoter that there is sufficient mitigation/compensation through the creation of new habitats and/or provision of special measures such as underpasses or green bridges to maintain the populations of the relevant species.
- 5.4. In accordance with the Environmental Memorandum, the nominated undertaker will prepare Ecology Site Management Plans at detailed design stage and prior to any works commencing on site. These will specify the ecological objectives of each ecological habitat creation area, the measures to be taken to establish and maintain and monitor these habitats, and the detailed planting requirements.

The Ecology Site Management Plans will also be prepared for each statutory and non-statutory site of nature conservation importance and ancient woodland affected by construction.

- 5.5. The nominated undertaker has set up an independent Ecology Review Group, members of which include Natural England, local authorities, nature conservation NGOs such as the wildlife trusts and relevant specialists as necessary. This group will have regular access to the monitoring outputs from habitat creation sites and will be invited to comment on progress and the requirement for any remedial action.

In addition, the nominated undertaker will ensure compliance, where appropriate, with relevant nature conservation legislation and policy with regard to protected species and habitats. This will include

- 5.6. Obtaining all relevant protected species licences for impacted fauna.

## **6. More information**

- 6.1. More detail on the Bill and related documents can be found at: [www.gov.uk/HS2](http://www.gov.uk/HS2)