



HIGH SPEED TWO PHASE ONE INFORMATION PAPER

E11: GREEN INFRASTRUCTURE AND THE GREEN CORRIDOR

This paper outlines the concept of a green corridor that will be developed through the construction, mitigation and implementation of the Proposed Scheme for HS2 Phase One.

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the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.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.

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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 Bill¹ 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.

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

2. Green infrastructure

- 2.1. This paper introduces the Green Infrastructure (GI) concept, which is a form of environmental best practice and policy that has been used to inform HS2 Ltd's approach to developing the Proposed Scheme.
- 2.2. GI is a recognised approach to planning and development that aims to create a planned network of high-quality green spaces, water resources and other environmental features. This network should function sustainably and meet various needs from a national to a local level.
- 2.3. GI can be applied to new projects and to the regeneration of urban areas. It is a broad idea: it can relate to the built or natural environment, and informs various aspects of project development, including design, engineering and environmental management. Considerations such as landscape, biodiversity and public access are all relevant.
- 2.4. GI is most successful when it is designed and managed as a multi-functional resource, providing a range of different benefits at the same time.

3. Green infrastructure and HS2

- 3.1. The HS2 Ltd Sustainability Policy aims to support the Government's goal to encourage well-being and protect the environment. The policy identifies that HS2 constitutes a major opportunity to help make the UK transport system more sustainable. A number of the policy's aims relate to GI concepts:
 - growth and regeneration - support sustainable economic development and the localism agenda for regeneration;
 - environmental change - seek to avoid significant adverse effects on communities, businesses, and the natural, historic and built environment. Minimise impacts where they occur, and enhance the environment as far as practicable to seek to achieve no net loss to the biodiversity ; and
 - resilience - build a well connected GI network that is adaptive, resilient for the long term, and seek to minimise the combined effect of the project and climate change.
- 3.2. The commitments made in the Sustainability Policy will take shape in our approach to creating GI. Where the GI approach is applied to the line of route, this will also be referred to as a 'green' or 'environmental corridor'.
- 3.3. The green corridor is not a single piece of infrastructure. The term refers to HS2 Ltd's aim that the GI network will have sustainability benefits for landscape, ecology and people. It informs HS2 Ltd's considerations regarding the railway corridor itself, but also the land directly around the scheme and any wider opportunities for mitigation beyond the railway.

4. Green infrastructure and the Environmental Statement

- 4.1. The Environmental Statement refers to the 'environmental corridor' that will be developed as part of the Proposed Scheme. Among other things, it considers:
- ecological mitigation - in the form of new or enhanced grassland and wetland habitats, woodland and hedgerows;
 - landscape and visual mitigation - in the form of locally designed earthworks to reflect local landform, to help integrate the Proposed Scheme into the local landscape character and to provide additional visual screening with the use of tree planting and hedgerows;
 - heritage mitigation - responding to heritage assets and their setting;
 - access and community space - including public rights of way, open spaces, access tracks and bridges across the railway; and
 - drainage and flood amelioration - including balancing ponds, drainage ditches and flood risk compensation land.
- 4.2. An independent design panel has been established to secure a scheme that acts as an exemplar for others across the world. The panel will have an important role in taking forward the GI concept through detailed design.
- 4.3. The environmental or green corridor is integral to HS2's aim of leaving a positive route legacy. It is linked to the project's aim to seek no net loss in biodiversity, and also the Government's commitment to planting at least four million trees as part of the mitigation proposals for Phase One and Phase Two.

5. Policy and legislative context

- 5.1. The importance of GI in HS2 Ltd's approach reflects the government's environmental aims, as set out in the following documents.
- 5.2. The Government's Natural Environment White Paper refers to the role of planning in protecting and improving the natural environment and facilitating coherent and resilient ecological networks that reflect the value of natural systems, and advocates that green spaces should be factored into the development of all communities.
- 5.3. The Government's Biodiversity Strategy for England builds on the Natural Environment White Paper, advocating the reduction of environmental pressures from planning and development, by taking a strategic approach to planning for nature and retaining the protection and improvement of the natural environment as core objectives of the planning system.
- 5.4. The National Planning Policy Framework supports the objectives of the Natural Environment White Paper, stressing a proactive and strategic approach to planning for the natural environment.

6. More information

- 6.1. More detail on the Bill and related documents can be found at: www.gov.uk/HS2
- 6.2. More details on the proposed route for HS2 can be found at:
www.dft.gov.uk/topics/high-speed-rail/line-of-route
- 6.3. More details on HS2 Ltd's Sustainability Policy can be found in Chapter 1 of Volume 1 of the Environmental Statement:
www.gov.uk/government/uploads/system/uploads/attachment_data/file/259491/Volume_1_Introduction_to_the_Environmental_Statement_and_the_Proposed_Scheme.pdf and
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/475766/HS2_Sustainability_Policy_Po4_Nov15.pdf