

## Design

This factsheet outlines the emerging design policy that will be put in place for the Proposed Scheme, which will include aesthetics and quality. This emerging design policy will also seek to enable the Promoter and the nominated undertaker to deliver the railway in an efficient and effective manner.

# 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 phases: Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route to Crewe. Phase 2b will extend the route to Manchester, Leeds and beyond (the 'Proposed Scheme').
- 1.2 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act (2017). In July 2017, the Government introduced a hybrid Bill to Parliament to seek powers for the construction and operation of Phase 2a. A hybrid Bill to seek powers for the construction and operation of Phase 2b is expected to be introduced to Parliament in 2020.
- 1.3 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.
- 1.4 The work to produce the Phase 2b Bill will include an Environmental Impact Assessment (EIA), the results of which will then be reported in an Environmental Statement (ES). The ES would be submitted alongside the Phase 2b Bill when it is introduced to Parliament. The emerging findings of the EIA were reported in a working draft Environmental Statement (WDES)<sup>1</sup> that was consulted on in late 2018.
- 1.5 As was the case with Phase One and Phase 2a, when the Phase 2b Bill is introduced to Parliament, the Secretary of State will also publish draft Environmental Minimum Requirements (EMRs). The EMRs will set out the environmental and sustainability commitments that will be observed in the construction and operation of Phase 2b.
- 1.6 A series of information papers were produced for the Phase One and Phase 2a hybrid Bills, explaining the commitments made in those Bills and EMRs. It is the Secretary of State's intention to follow a similar process for the Phase 2b Bill. These information papers for Phase 2b will be used to provide information about Phase 2b itself, the powers contained in the Phase 2b Bill when it is introduced to Parliament and how decisions on Phase 2b have been reached. It is currently proposed that these information papers for Phase 2b will be published at the time the Phase 2b Bill is introduced in Parliament.

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<sup>1</sup> The WDES presented draft environmental information based on a stage in the ongoing design and assessment process for the Proposed Scheme. It included a description of the existing environment; an evaluation of the anticipated environmental impacts of the Proposed Scheme; and the measures being proposed at the time to manage the anticipated impacts. The ES submitted alongside the hybrid Bill will reflect any changes made following further work on the design and EIA, the WDES consultation, and any further consultation on the Proposed Scheme.

- 1.7 The Secretary of State for Transport will be ‘the Promoter’ of the Phase 2b Bill. The Promoter will also eventually appoint a body responsible for delivering the Proposed Scheme under the powers to be granted by the Phase 2b Bill. This body will be known as the ‘nominated undertaker’. There may well be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Phase 2b Bill, the policies established in the Phase 2b EMRs and any commitments provided in the Phase 2b information papers.
- 1.8 These Phase 2b Factsheets have been produced to provide information on the emerging proposals for measures to manage the design process for Phase 2b and to control impacts which may arise from the construction and operation of the Proposed Scheme. These measures may then be applied to Phase 2b as commitments made through the eventual Phase 2b Bill, EMRs or information papers.

## 2 Overview

- 2.1.1 This factsheet outlines the emerging design policy that will be put in place for the Proposed Scheme, which will include aesthetics and quality. This emerging design policy will also seek to enable the Promoter and the nominated undertaker to deliver the railway in an efficient and effective manner.
- 2.1.2 The design of HS2 will be developed in line with the HS2 Design Vision, which can be found at: <https://www.gov.uk/government/publications/hs2-design-vision>.
- 2.1.3 In addition, the Secretary of State has established an independent Design Panel, so as to ensure that designs of major stations and structures and other related design aspects of the new railway will complement local aspirations and contribute to the natural and built environment.

## 3 Design Policy

- 3.1.1 The Promoter and the nominated undertaker will seek to ensure that:
- the design is safe, efficient, and meets with the requirements of whole life operation and maintenance alongside initial buildability;
  - the design contributes to the Government’s pursuit of sustainable development, as set out in the National Planning Policy Framework, which involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people’s quality of life;

- the design of all visible elements of the built and landscaped environment in both rural and urban areas are sympathetic to their local context, environment and social setting;
- the design cohesion is achieved through a strong aesthetic ethos and a recognisable architectural language;
- the design is developed through engagement to seek peoples' views and ideas on the aesthetic design of the visible buildings and permanent structures;
- the design has a culture of cost awareness to give cost/quality decisions which achieve best value for the funders;
- design innovation is encouraged to generate best value to funders, users and those affected by the railway; and
- the design considers the passenger experience.

## 4 Promoter's requirements

4.1.1 The principles of the design policy will support the requirements defined by the Promoter to HS2 Ltd. The key requirements that have been set by the Promoter are noted below. These will not be repeated in the design policy.

- to provide an efficient high speed rail network capable of safe construction and operation;
- to limit adverse environmental and visual impacts during design construction and operation;
- to deliver value, and maintain budget compliance;
- to develop a sustainable development policy setting out defining principles;
- trains, stations and associated facilities to be fully accessible to all passengers and provide efficient access to other rail networks and other transport modes;
- to engage with local authorities and other stakeholders to identify additional potential regeneration opportunities within area planning frameworks;
- to comply with relevant European Union Technical Specifications for Interoperability;
- to develop proposals in order to minimise whole life whole system operation, maintenance and renewal costs; and
- to plan with zero-based targets for accidents and injuries.

## 5 Design development and the role of the planning authority

5.1.1 At present the design of the Proposed Scheme is being developed to provide the level of detail necessary for the purposes of supporting the Phase 2b Bill

submission proposed for 2020 and the requirements of the EIA in accordance with the Standing Orders of Parliament.

- 5.1.2 The level of detailed design necessary to enable the Proposed Scheme to be constructed has yet to be carried out. Detailed design development will not commence before the Phase 2b Bill is deposited in Parliament. Although detailed design may commence as the Phase 2b Bill progresses through Parliament, it will not be completed until after the Phase 2b Bill has secured Royal Assent. Once the design is complete, the nominated undertaker will need to apply for approval of the detailed design of a range of elements of the Proposed Scheme from local qualifying planning authorities along the route, in accordance with the proposed planning regime that will be applied to the Proposed Scheme by the eventual Phase 2b Bill. For further information on the proposed planning regime for the Proposed Scheme see the Phase 2b Factsheet: Control of Environmental Impacts.
- 5.1.3 This proposed planning regime will allow local qualifying planning authorities to ensure that the design of permanent structures fits into the local environment.
- 5.1.4 As detailed in the Phase 2b Factsheet: Control of Environmental Impacts, a local qualifying planning authority will, under the proposed planning regime, be required to approve plans and specifications for certain matters which may include buildings and road vehicle parks, terracing, cuttings, embankments and other earthworks, fences, walls or other barriers, transformers, telecommunication masts, pedestrian access to the railway line, artificial lighting, and waste and spoil disposal.
- 5.1.5 Ongoing engagement with planning authorities is critical to the design development process. It will ensure the detailed design of the Proposed Scheme has regard to planning authority aspirations, and fits within the local environment.
- 5.1.6 As with previous hybrid Bills for railway schemes, a Planning Forum may be established for Phase 2b. If established, this would consider common designs for certain structures. Discussions between the nominated undertaker and the relevant planning authority would determine the appropriateness of the common designs to the local environment.
- 5.1.7 The Planning Memorandum which is proposed to form part of the EMRs is expected to provide the commitment that the nominated undertaker will engage in proportionate forward discussions about prospective requests for approval with the qualifying local planning authority and statutory consultees. Forward discussions will, as relevant, include design development, submission dates and planning committee cycles.

## 6 Design development and public engagement

6.1.1 The Promoter recognises the importance of public engagement in the detailed design development process. The exact scope and nature of public engagement that would take place following Royal Assent for the Phase 2b Bill would depend on the element being designed. For example, the Promoter would expect a higher degree of public engagement on those parts of the railway that have the most significant impact on people.

6.1.2 Following Royal Assent for the Phase 2b Bill, the Promoter would set out its approach to public engagement in design development. The current emerging proposals for this approach are as follows:

- Key design elements - the nominated undertaker would engage the public on the detailed design development of key elements of infrastructure, such as main viaducts and maintenance buildings in sensitive areas. The engagement exercise would likely focus on engaging the public in the locality where the infrastructure is located. A list of the key design elements relevant to the Proposed Scheme will be included in the Phase 2b Information Paper on Design that will be published at the time the Phase 2b Bill is introduced in Parliament.
- Common design elements - the nominated undertaker would develop standard or common designs for certain permanent structures associated with the railway (such as road-bridges, foot-bridges, noise barriers). We expect the Promoter would undertake wider public engagement on design development for common design elements, including for example, interactive on-line materials, with associated local and route-wide publicity.

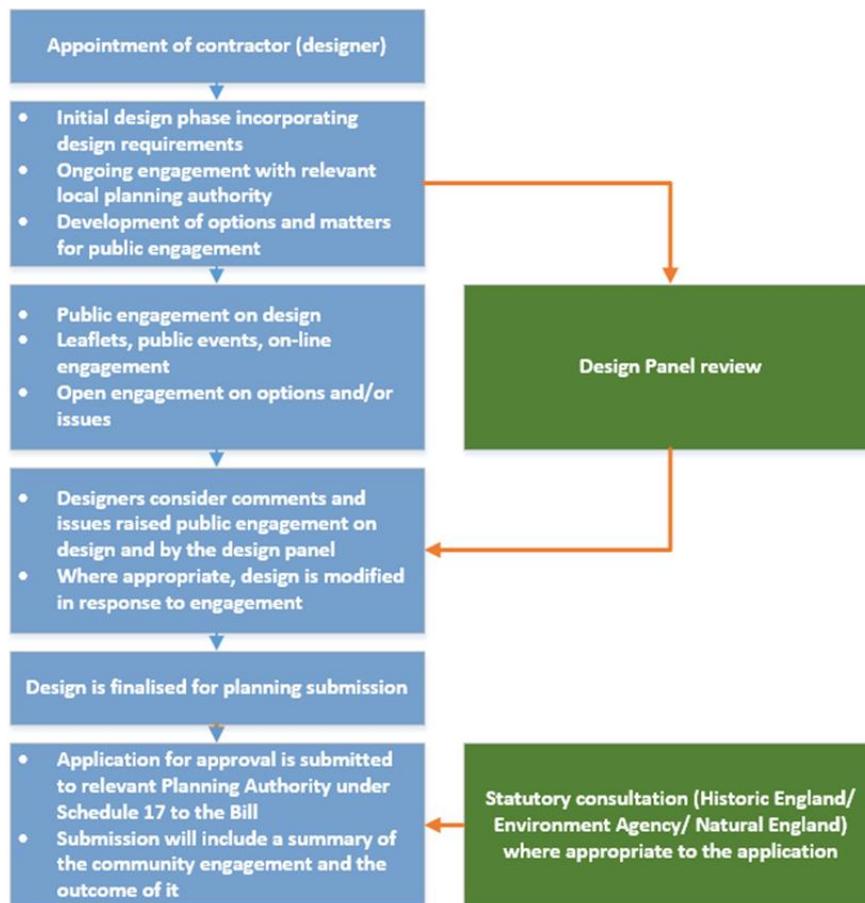


Figure 1: Example of design development process

## 7 Design Panel

- 7.1.1 The independent HS2 Design Panel has been set up to provide professional expertise and advice, acting as an advisor and critical friend to HS2 Ltd. It brings together a comprehensive range of design disciplines. The HS2 Design Panel's remit is route-wide and includes Phase 2b.
- 7.1.2 Sadie Morgan has been appointed Chair of the HS2 Design Panel, and a pool of panel members covering all design disciplines has been appointed to independently assist the design challenge. The Design Panel will assist HS2 Ltd through the provision of advice, and HS2 Ltd will work in partnership with a range of organisations, including planning authorities.
- 7.1.3 The aim will be to deliver a high standard of design that is also cost-effective and sustainable. Further information on the role of the Panel and its experts can be found at: <https://www.gov.uk/government/publications/hs2-design-panel>

## 8 More information

- 8.1.1 Further factsheets and details on the Proposed Scheme can be found at:  
[www.hs2.org.uk/phase2b](http://www.hs2.org.uk/phase2b)