

Future highway maintenance responsibilities

This factsheet outlines the maintenance responsibilities that are expected to apply to new highways created, or existing highways altered, by the Proposed Scheme.

Introduction

- 1.1.1 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. The Western Leg of Phase 2b comprises an extension of the network to Manchester and a connection to the West Coast Main Line at Golborne, and is referred to as the Western Leg hybrid Bill. The Eastern Leg of Phase 2b currently comprises an extension of the network from the West Midlands through the East Midlands to Leeds.
- 1.1.2 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.
- 1.1.3 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.
- 1.1.4 In February 2020, the Government announced its intention to draw up an Integrated Rail Plan. This will recommend a way forward on scoping, phasing and sequencing the delivery of HS2 Phase 2b, Northern Powerhouse Rail, Midlands Rail Hub and other proposed rail investments across the north. At the same time, the Government asked HS2 Ltd to prepare the Western Leg hybrid Bill, provided it does not prejudge any recommendations or decisions that will be taken in this plan, which will be published by the end of the year.
- 1.1.5 It is intended to deposit a Western Leg hybrid Bill seeking powers to construct and operate this phase in Parliament in early 2022 or sooner if possible (the Proposed Scheme). The work to produce the 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 Bill when it is introduced to Parliament. As was the case with Phase One and Phase 2a, when the 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 of the Proposed Scheme.
- 1.1.6 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 Western Leg Bill. These information papers will be used to provide information about the Proposed Scheme itself, the powers contained in the Bill and how decisions on

the Proposed Scheme have been reached. It is currently proposed that these information papers for the Western Leg of Phase 2b will be published at the time the Bill is introduced in Parliament.

- 1.1.7 The Secretary of State for Transport will be 'the Promoter' of the Western Leg Bill. The Promoter will also eventually appoint a body responsible for delivering the Proposed Scheme under the powers to be granted by the 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 Bill, the policies established in the Western Leg EMRs and any commitments provided in the Western Leg information papers.
- 1.1.8 These Western Leg factsheets have been produced to provide information on the emerging proposals for measures to manage the design process for the Proposed Scheme and to control impacts which may arise from the construction and operation of the Proposed Scheme. These measures may then be applied to the Western Leg as commitments made through the eventual Bill, EMRs or information papers.

2 Overview

- 2.1.1 This factsheet outlines the maintenance responsibilities that are expected to apply to new highways created, or existing highways altered, by the Proposed Scheme.
- 2.1.2 Constructing the Proposed Scheme will require the nominated undertaker to deliver a wide range of highway works, including construction of new highways, and stopping up of, and alterations to, existing highways.
- 2.1.3 The arrangements for future maintenance of highway works constructed by the nominated undertaker will be set out in the Western Leg hybrid Bill. This will include both roads and public rights of way, together with any associated structures such as bridges under or over the Proposed Scheme.
- 2.1.4 The information here is primarily intended to help inform discussions between the nominated undertaker and each highway authority.
- 2.1.5 For works in Scotland, the term 'highway' used in this document should be understood to mean 'road', 'footpath' or other route to which the public has lawful access as the context requires. Similarly, the term 'highway authority' should be understood to mean 'roads authority'.

3 General

- 3.1.1 With regard to the construction of a new highway or alteration to an existing highway, taking the Phase One and Phase 2a hybrid Bill as examples: it is expected that the Phase 2b Bill would require that the new or altered highway must be maintained by, and at the expense of, the nominated undertaken for: a period of 12 months from the date of practical completion; or, if later, the date on which it is first open for public use, and after the end of that period must be maintained by, and at the expense of, the highway authority.
- 3.1.2 This 12-month 'maintenance period' is a well-established principle; for example in the Channel Tunnel Rail Link Act 1996 and the Crossrail Act 2008, and in Schedule 4 of the High Speed Rail (London West Midlands) Act 2017. Parliament has previously accepted in these cases that such a provision strikes a reasonable balance between the nominated undertaker's powers to construct the Proposed Scheme and the highway authority's duties to maintain the public highways in its area.
- 3.1.3 Subject to the exceptions discussed in the following sections of this factsheet, it is expected that this future maintenance responsibility for highway authorities would apply to all new or altered highway assets. These would include 'off-line' highway works not involving crossings of HS2 as well as those associated with roads passing under or over the railway. Typical examples of such highway assets include:
 - Carriageways;
 - Kerbs, footways and paved areas;
 - Verges and other grassed or landscaped areas;
 - Embankments, cuttings and other earthworks;
 - Drainage (including any pumps that may be required);
 - Road restraint systems (vehicular and pedestrian);
 - Traffic signs, traffic signals and road markings;
 - Road lighting;
 - Communications networks and power supplies owned and/or operated by the highway authority (including any associated service ducts);
 - Bridges (other than those over or under the Proposed Scheme or where the responsibility lies with a third party e.g. Network Rail);
 - Culverts, retaining walls and other structures;
 - Fencing, walls, hedges and ditches (where not the responsibility of the adjacent landowner); and
 - Miscellaneous street furniture (except that which is the responsibility of a third party).

3.1.4 The future ownership of (and hence any residual maintenance liability for) lengths of highway which are permanently stopped-up will be covered in a further Western Leg Factsheet: Highways and Traffic during Construction. Where appropriate, an easement may be granted to provide rights of access and maintenance for the highway authority through a permanently stopped-up length of highway for assets such as existing drainage networks.

4 Overbridges

- 4.1.1 It is expected that the Bill would require that the maintenance requirements above do not impose any obligation on the highway authority in relation to the structure of any bridge carrying a highway over any railway of the nominated undertaker.
- 4.1.2 The structure of a bridge carrying a highway over the Proposed Scheme is considered to comprise the following elements:
 - Deck (including waterproofing, bearings and integral expansion joints);
 - Piers (for bridges with multiple spans);
 - Abutments (including bearing shelf and back-of-wall drainage) and wingwalls;
 - Foundations; and
 - Parapets.
- 4.1.3 It is expected that the nominated undertaker would be responsible for maintenance of all elements of the structure of an overbridge, including the removal of graffiti from both faces of parapets and maintaining any of the nominated undertaker's own apparatus passing across an overbridge. This responsibility would extend to any backfill forming an inherent part of the structural design for a bridge abutment or wingwall, but any other earthworks would become the responsibility of the highway authority in the normal way (see below).
- 4.1.4 Section 3 of this factsheet explains that it is expected that the highway authority will be responsible, after the 12 month maintenance period, for maintaining those elements not forming part of the structure. Typical examples of such elements on a road overbridge include:
 - Carriageway surfacing and any other pavement layers above the waterproofing;
 - Full depth above waterproofing for all kerbing, footways and paved areas on the deck (including any supporting infill);
 - Drainage of the deck surface area between parapets (including any gullies, carrier drains and combined kerb/drainage systems);
 - Road markings; and

- Any traffic signs, road lighting or other street furniture on the structure.
- 4.1.5 It is expected that the same responsibilities would apply to bridges carrying public rights of way over the Proposed Scheme where such elements are present in the design. For example, in the case of a single layer applied to act as both waterproofing and surfacing on a footbridge deck, this would be treated as waterproofing (i.e. part of the structure) for the purposes of paragraphs 4.1.2 and 4.1.3 above.
- 4.1.6 In the case of 'green bridges' where only part of the width between parapets is dedicated as public highway, it is expected that the remaining width would be the responsibility of the nominated undertaker. For more information on Green Bridges, see the Phase 2b Western Leg Factsheet: Ecology.

5 Viaducts and underbridges

- 5.1.1 It is expected that the Bill would not include specific mention of the structure of any bridge carrying the Proposed Scheme over a highway. However, the deck, piers, abutments and foundations of such structures would be considered to be the responsibility of the nominated undertaker.
- 5.1.2 In the case of an integral box structure, the base of the box would also be considered to be the responsibility of the nominated undertaker.
- 5.1.3 The nominated undertaker would also be responsible for the removal of graffiti from the decks, piers and abutments of a viaduct or underbridge, and maintaining any of its own apparatus passing under a viaduct or through an underbridge.
- 5.1.4 Section 3 of this factsheet explains that it is expected that the highway authority would have maintenance responsibility for all highway assets within the agreed highway boundary after the 12 month maintenance period.
- 5.1.5 For single-span structures, the highway boundary would be considered to be the inner face of each abutment (except where agreed in writing with the nominated undertaker).
- 5.1.6 For structures with multiple spans, the highway boundaries would be considered to be either:
 - a) the inner face of any highway boundary fencing passing through or under the structure; or, where no such fencing exists; or
 - b) the inner face of the abutment(s).

- 5.1.7 In addition to the typical examples of elements to be maintained by the highway authority given for a road overbridge in paragraph 4.1.4 above, other aspects it would typically be responsible for would include:
 - All pavement layers;
 - Any hard landscaping in the shadow of the structure;
 - All earthworks (including any capping layers or ground treatment) supporting the highway;
 - Any highway drainage passing through or under the structure; and
 - Any highway communications networks, power supplies and service ducts;
- 5.1.8 The same requirements would apply to viaducts or bridges carrying the Proposed Scheme over a public right of way where such elements are present in the design.

6 Tunnels

- 6.1.1 It is expected that the Bill would state that the general requirement given above would not impose any obligation on the highway authority for the structure of any tunnel carrying a highway under any railway of the nominated undertaker.
- 6.1.2 To the extent that they are applicable to highways in tunnels, the maintenance responsibilities would be equivalent to those where highways pass under viaducts or through underbridges.

7 Winter maintenance

7.1.1 It is expected that the Bill would state that the highway authority must ensure, so far as is reasonably practicable, that safe passage along the new or altered highway is not endangered by snow or ice during the 12-month maintenance period, unless otherwise agreed with the nominated undertaker.

8 Maintenance arrangements

- 8.1.1 It is expected that the Bill would provide for alternative maintenance arrangements to be agreed between the nominated undertaker and the highway authority. Such alternative maintenance arrangements may be appropriate where highway authorities are best placed to undertake certain activities during the 12-month maintenance period. These might include:
 - Crash damage repair;
 - Small item maintenance, such as bulbs; and

- Cyclical maintenance activities such as routine gully emptying, road sweeping and grass cutting.
- 8.1.2 Unless otherwise agreed, the nominated undertaker would remain responsible for carrying out the mud control measures required under the Bill.
- 8.1.3 Notwithstanding the above, it is expected that the nominated undertaker would also remain responsible for the following on-highway activities during the 12-month maintenance period:
 - Correcting defects of workmanship and materials;
 - Completion of any works agreed as necessary following Stage 3 Road Safety Audits; and
 - Installation, maintenance and removal of any temporary traffic management measures required in connection with the above.
- 8.1.4 It is planned to adopt the common approach to maintenance agreements currently being developed on Phase One of HS2 in conjunction with the relevant highway authorities.
- 8.1.5 Upon Royal Assent, and where appropriate, the nominated undertaker would then enter into individual maintenance agreements with highway authorities to clarify future maintenance responsibilities for the new or altered highway assets in each area. This can include the demarcation of adjacent highway and railway assets (e.g. earthworks, drainage and non-bridge structures).

9 Road restraint systems

- 9.1.1 Road restraint systems on the approach to bridges are not part of the structure carrying a highway over or under the Proposed Scheme and would thus normally be wholly the responsibility of the highway authority.
- 9.1.2 However, as an exception, and only where essential to protect the railway from errant road vehicles, it is expected that the nominated undertaker may seek agreement from the highway authority under the Bill to retain maintenance responsibility for defined lengths of road restraint system on the immediate approaches to certain overbridges.
- 9.1.3 Similarly, the nominated undertaker may seek agreement for road restraint systems in respect of certain other potentially 'higher errant vehicle risk' circumstances (e.g. where a road runs closely parallel to and above a section of railway).

- 9.1.4 Offering to enter into any such agreement would be purely at the discretion of the nominated undertaker.
- 9.1.5 The nominated undertaker would not expect to consider retaining maintenance responsibility for road restraint systems on the immediate approaches to viaduct or underbridge piers and abutments, or on highway tunnel approaches, as these can be maintained by the highway authority in the normal way without implications for the operational railway.

10 Highway maintenance costs

- 10.1.1 Highway authorities receive funding for local highway maintenance costs from the Highways Maintenance Block Funding grant from the Department for Transport (DfT) and the Revenue Support Grant (RSG) from the Ministry for Housing, Communities and Local Government, along with local income sources. The DfT Highways Maintenance Block Funding grant is refreshed every few years in order to take into account any changes (e.g. road length) in highways that have become the responsibility of the highway authority to maintain.
- 10.1.2 Highway authorities have previously expressed concern that the Proposed Scheme will lead to an increase, in particular, in the number of highway-related structures that require maintenance. As such, they are concerned that the Proposed Scheme could represent a 'new burden' under the 2011 New Burdens Doctrine.
- 10.1.3 Where new or altered highways constructed as part of the Proposed Scheme become the responsibility of a local highway authority to maintain following the 12-month maintenance period, it is expected that the DfT Highways Maintenance Block Funding grant amount that a highway authority receives would be amended (at the next data refresh point) to take into account any changes in the length of highways and number of highway structures. It is recognised that there may be a gap between when a highway becomes the responsibility of a highway authority, and when this grant is refreshed, leading to highway authorities having responsibility for the maintenance of new or altered highways without additional funding. In addition, these new or altered highways may require maintenance of new assets, such as pumping stations, the cost for maintenance of which may not be taken into account in existing funding streams. On the other hand, in many places the Proposed Scheme would replace existing older roads with new roads constructed to modern specifications that are likely to require little, if any, maintenance in their first few years of operation.
- 10.1.4 It is expected that any financial effects relating to the handover of new or altered highway assets to highway authorities would not be clear until the

construction programme for the Proposed Scheme is confirmed following Royal Assent of the Bill. A full "new burdens" assessment would be undertaken prior to commencement of construction. In the event that this demonstrates that the Proposed Scheme is leading to a new burden on any highway authorities, these additional costs would be reimbursed.

10.1.5 A preliminary analysis into the expected cost of highway maintenance will be undertaken by HS2 Ltd towards the end of the passage of the hybrid Bill through Parliament in order to inform discussions with highway authorities.

11 Possible retention of temporary traffic management measures

- 11.1.1 It is possible that highway authorities may request (or agree to) the retention of certain temporary traffic management measures that are required to help mitigate the impacts of the additional HS2 large goods vehicle traffic during construction beyond their use in the construction phase.
- 11.1.2 Such mitigation measures would normally be removed by HS2 following completion of the additional usage by HS2 large goods vehicles, but where it is agreed that the measures should be retained permanently, it is expected they would be maintained by, and at the expense of, the highway authority.

12 Warranties and guarantees

12.1.1 The nominated undertaker would, at the request of the highway authority, use reasonable endeavours to negotiate a collateral warranty for the benefit of the highway authority from the date that it becomes responsible for the maintenance of the new or altered highway or, if it is possible to do so, would enforce any rights which it has under its contract for the benefit of the highway authority.

13 Latent defects

13.1.1 In the event that a latent defect manifests itself in any HS2 highway works after the 12-month maintenance period and within the period during which a claim can be made for a fault in design, materials or workmanship, the nominated undertaker would – at the request of the highway authority – use reasonable endeavours to secure an appropriate remedy in accordance with the terms of the relevant design or construction contract.

14 More information

14.1.1 Further factsheets and details on the Proposed Scheme can be found at: www.hs2.org.uk/phase2b