

## HIGH SPEED TWO

### PHASE 2a INFORMATION PAPER

## D11: TRACK POSSESSIONS FOR PHASE 2a ENGINEERING WORK

This Information Paper outlines HS2 Ltd's approach to engineering access "possessions" on the conventional railway that will be necessary for the construction of Phase 2a. It also describes the possessions that, at the time the Bill was deposited, were estimated to be required to implement the Proposed Scheme and provides an indication of their likely effects on existing rail passenger services.

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 High Speed Rail (West Midlands-Crewe) Bill which is now enacted. It was finalised at Royal Assent and no further changes will be made.

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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# D11: TRACK POSSESSIONS FOR PHASE 2a ENGINEERING WORK

## 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 construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act 2017.
- 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 July 2017, the Government introduced a hybrid Bill<sup>1</sup> to Parliament to seek powers for the construction and operation of Phase 2a of HS2 (the Proposed Scheme). The Proposed Scheme is a railway starting at Fradley at its southern end. At the northern end it connects with the West Coast Main Line (WCML) south of Crewe to allow HS2 services to join the WCML and call at Crewe Station. North of this junction with the WCML, the Proposed Scheme continues to a tunnel portal south of Crewe.
- 1.4. The work to produce the Bill includes an Environmental Impact Assessment (EIA), the results of which are reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs)<sup>2</sup>, which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.5. The Secretary of State for Transport is the Promoter of the Bill through Parliament. The Promoter will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill. This body is known as the 'nominated undertaker'. The nominated undertaker will be bound by the obligations contained in the Bill and the policies established in the EMRs. There may be more than one nominated undertaker.
- 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 Proposed Scheme have been reached.

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

<sup>2</sup> For more information on the EMRs, please see Information Paper E1: Control of Environmental Impacts.

## 2. Overview

- 2.1. This Information Paper summarises HS2 Ltd's latest approach to engineering access "possessions"<sup>3</sup> on the conventional railway that will be necessary for the construction of the Proposed Scheme.
- 2.2. It also describes the possessions that are currently estimated to be required to implement the Proposed Scheme and provides an indication of their likely effects on existing rail passenger services.
- 2.3. The current projection of possessions contained within this information paper reflects changes at Crewe made through AP2 by HS2 to reflect significant work on design that both HS2 Ltd and Network Rail have undertaken to align the Proposed Scheme to Network Rail's proposals for a Crewe Hub. However, it does not include possessions associated with Network Rail renewals or Crewe Hub works outside of those proposed by HS2 through AP2.
- 2.4. HS2 Ltd will continue to explore, with the wider railway industry, what opportunities there are to undertake Phase 2a engineering work on the conventional railway at the same time as other enhancement and renewal works so as to reduce impacts on passengers and freight.

## 3. Possession Planning

- 3.1. The design of the Proposed Scheme sought to minimise disruption to the conventional rail network during construction. While the majority of construction works will not affect the existing railway, possessions will be needed where works on or near the existing railway cannot be done safely while trains are still running.
- 3.2. Where possible, these works are planned to be undertaken in existing night-time and weekend maintenance possession periods (i.e. those already planned for maintenance of the conventional network), to minimise disruption to passenger and freight services. These are known as 'non-disruptive possessions' as they do not affect scheduled passenger or freight services.
- 3.3. For more complex works that cannot reasonably be split up to be delivered within these existing maintenance possession periods, 'weekend possessions' of a day's duration or longer may be required. For the purpose of this analysis, weekend possessions can be:
  - 24-28 hours (one day closure);
  - 40-54 hours (a two day all-weekend closure);

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<sup>3</sup> Where works cannot safely be undertaken while trains are running on a section of the conventional railway, trains are diverted or stopped and possession of the line is taken for a specified period. Each closure period is known as a 'possession'. In this paper, possessions longer than a weekend (including bank holidays), are described as 'blockades'.

- 72 hours (a three day bank holiday weekend closure); or
  - 100 hours (e.g. a four day Easter weekend closure).
- 3.4. Where major works require a possession period longer than 100 hours, that cannot be accommodated in a weekend (including bank holiday weekends), these are referred to as 'blockades'. For information on the blockades expected to be required to construct the Proposed Scheme, see section 5 below.
- 3.5. Possessions will be booked through Network Rail in accordance with standard industry processes. The works will either be undertaken by Network Rail on the nominated undertaker's behalf or they will be managed in accordance with standard railway 'asset protection' processes, which ensure that Network Rail and its customers are appropriately protected. It is anticipated that Network Rail's existing obligations will influence the way the works are undertaken. This includes the obligations in its network licence issued by the Office of Rail and Road.
- 3.6. The possession planning process includes consultation with the wider railway industry, including operators, to ensure that the relevant information is provided, that the possessions are considered in the context of wider railway operations, and that appropriate mitigation measures are put in place. Where compensation is due for the impacts of possessions on operators, it is anticipated such compensation will be provided in accordance with standard industry processes.

#### **4. Estimated requirement for weekend possessions**

- 4.1. Table 1 shows a high-level estimate of possessions required, the lines affected and a general indication of the likely disruption that is anticipated to result in each case. The number and duration of possessions required is only an estimate at this stage. Factors such as revisions to the engineering design, changes resulting from the Parliamentary process, more detailed construction planning, feedback from operators, possessions required on the conventional railway for other works or unforeseen delays during construction can all affect the timing and duration of possessions.
- 4.2. As part of the possession planning process, HS2 Ltd will work closely with Network Rail to coordinate the above possessions with other planned maintenance or renewals works as 'non-disruptive' possessions, to minimise overall disruption to the travelling public and freight industry.

Table 1 – December 2020 estimate of weekend possession requirements to construct the Proposed Scheme

<b>Works</b>	<b>Total weekend possessions</b>	<b>Indicative date</b>	<b>Lines affected</b>
<b>Great Haywood</b>  Great Haywood Viaduct construction.	<b>1</b>  <b>Civils</b> 1 x two day	2024-2027	West Coast Main Line: Macclesfield to Colwich Line
<b>Stone</b>  Railhead connection to the Norton Bridge to Stone Line.  Norton Bridge to Stone Railway underbridge.	<b>6</b> <b>Civils</b>  1 x two day  1 x two day  <b>Rail Systems</b> 4 x two day	2024 - 2029	West Coast Main Line: Norton Bridge to Stone line
<b>Crewe to Whitmore</b>  HS2 to NR connection and associated works. River Lea Viaduct. Newcastle Road new overbridge and demolition. Casey Lane Demolition. Blakenhall Cutting Bridleway 8 overbridge Betley Road Junction. New West Coast Main Line diversion and junction works. Blackenhall cutting and bridge works. Platform 5 extension works at Crewe	<b>79</b> <b>Civils</b>  4 x two day (River Lea Viaduct)  1 x two day (Newcastle Road overbridge)  1 x two day (demolition of Newcastle Road and Casey Lane overbridges)  1 x two day (new BW8 overbridge)  1 x two day (demolish existing BW8 overbridge)  <b>Rail Systems</b> 32 x one day 38 x two day 1 x three day	2024-2029	West Coast Main Line (between Crewe and Norton Bridge including Crewe Station)
<b>Crewe Independent Lines</b>  Installation of platform, junction remodelling and installation of one crossover north of Crewe Station.	<b>75</b>  20 x one day 55 x two day	2023-2029	Independent lines (freight use) at Crewe  West Coast Mainline: Crewe to Manchester Line
<b>Handsacre</b>  Harvey's Rough Viaduct	<b>6</b>  Civils  6 x two day	2023-2026	West Coast Mainline

- 4.3. On the basis of this analysis, the total number of weekend possessions that would be needed to implement the Proposed Scheme is set out in Table 2 below.

Table 2 Total weekend possessions to implement the Proposed Scheme.

Duration	Passenger lines	Freight lines	Total
One day weekend	32	20	52
Two day weekend	59	55	114
Three day weekend (Bank Holiday)	1	0	1
Four day weekend (Easter)	0	0	0
Total	92	75	167

## 5. Blockades

- 5.1. The information below summarises the high level estimate of blockades required. It should be noted that the number and duration of blockades required could only be estimated at Bill deposit stage. Factors such as revisions to the engineering design, more detailed construction planning, feedback from operators, possessions required on the conventional railway for other works or unforeseen delays during construction can all affect the timing and duration of blockades.

### *Crewe Independent Lines*

- 5.2. There is a single blockade that is envisaged to be required on the Crewe Independent freight lines while work is undertaken to install a platform, remodel the existing junctions and install one new crossover north of Crewe Station. This involves a 9 day blockade of the Independent lines (Liverpool, Manchester, Salop, Up and Down).
- 5.3. The blockade does not directly affect passenger services, as passenger services do not ordinarily operate over this infrastructure in the normal course of operations.
- 5.4. Diversionary routes for freight trains through the existing station do exist, and it is anticipated that these will be used during the blockades. Detailed arrangements will need to be agreed with Network Rail and the freight operating companies to ensure that the impact of these works on freight operations are minimised.
- 5.5. Network Rail is continuing to develop its planned signalling renewals at Crewe. This blockade does not include Network Rail renewals and if both elements of

work were to proceed, coordination of any blockades would be undertaken where practicable.

- 5.6. Within this design work, Network Rail is also considering whether reinstatement of platform 13 might be an alternative to the Independent freight lines platform proposed by HS2 in AP2. If that is possible, it could reduce the impacts for freight operators and remove the need for this blockade.

#### *West Coast Main Line: Crewe to Whitmore*

- 5.7. There is a single blockade which is envisaged to be required on the West Coast Main Line to the south of Crewe, for the more complex junction installation works, including testing and commissioning of signalling and power systems. This involves a 9 day blockade.
- 5.8. The timing of this blockade and detailed mitigation measures, including diversion routes, will be agreed through close working with Network Rail to ensure that disruption is minimised, and where practicable, aligned with renewals works and any Crewe Hub proposals.

## **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)
- 6.2. More detail on the Crewe Hub Consultation Response can be found at: <https://www.gov.uk/government/publications/hs2-crewe-hub-consultation-governments-response>