

HIGH SPEED TWO PHASE 2a INFORMATION PAPER

F6: RAIL FREIGHT OPERATIONS

This paper outlines the interfaces between rail freight operations and HS2 both during construction and after the Proposed Scheme is in operation.

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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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 Bill¹ 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)², 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.

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

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

2. Overview

- 2.1. This information paper highlights the interfaces between HS2 and rail freight operations as a result of the implementation of the Proposed Scheme. They can be categorised under three broad headings (recognising that there is scope for overlap):
 - temporary impacts arising as a consequence of construction activities;
 - changes to the classic rail infrastructure to facilitate the construction or operation of the Proposed Scheme; and
 - the operation of HS2 classic-compatible services on the existing rail network and the associated released capacity arising from the operation of train services on the dedicated HS2 infrastructure.
- 2.2. The paper also sets out why rail freight services are not planned to run on the new HS2 infrastructure.

3. Interfaces with freight

- 3.1. The Bill does not change the regulatory structure for the railway set out in the Railways Act 1993 (as amended by the Railway Act 2005). This means that the expectation is that the existing Network Code³ arrangements to regulate works on the existing network and track access processes will apply once the Proposed Scheme is constructed.
- 3.2. It is recognised that there are likely to be a number of detailed matters which cannot be covered appropriately in this more general information paper. HS2 Ltd anticipates further detailed discussion with individual operators to understand their concerns and explore possible measures that could be considered by the wider rail industry.
- 3.3. HS2 Ltd expects to work with all relevant parties – including the Department for Transport (DfT), Network Rail and Office of Rail and Road (ORR), as well as the specific freight operators and infrastructure owners – to properly understand and address the freight industry’s concerns, and to best take advantage of the industry’s detailed knowledge and experience.

4. Temporary impacts as a consequence of construction activities for the Proposed Scheme

- 4.1. There are two related but distinct construction related activities that have the potential to cause impacts on rail freight operations:
 - As a consequence of construction works, possession(s) of the railway may be required at discrete sites on the existing rail network. These works will vary

³ The Network Code is a common set of rules and industry procedures that apply to all parties who have a contractual right of access to the track owned and operated by Network Rail.

in size and complexity, for example the construction of the connection to the WCML south of Crewe, and a simple crossing for the Proposed Scheme over the conventional railway near Great Haywood.

- Rail systems equipment such as rails, aggregates, track support systems, OLE components and cables, as well as some excavated material arising from construction works are proposed to be transported via rail freight on the existing rail network.
- 4.2. Where the nominated undertaker is undertaking works on or near the existing railway, the works will be either undertaken by Network Rail on the nominated undertaker's behalf, or will be managed in accordance with standard railway "asset protection" processes such that Network Rail (and its customers) are appropriately protected and that works are undertaken in a way which minimises adverse impacts so far as is reasonably practicable. It is anticipated that Network Rail's existing obligations, including their licence obligations, will influence the way such works are undertaken.
 - 4.3. Where railway possessions are required in order to deliver the Proposed Scheme, such possessions will be booked by or through Network Rail in accordance with standard industry processes. Network Rail's processes provide for appropriate consultation with the wider railway industry, including rail freight operators, to ensure that appropriate information is provided, that the possessions are secured in a strategic manner considering the wider railway, and that appropriate mitigation measures are put in place. Where compensation is due, it is anticipated that such appropriate compensation will be provided through Network Rail in accordance with standard industry processes.
 - 4.4. Hs2 Ltd's analysis indicates that at the peak of construction, there will be 6-8 freight or engineering trains per day in each direction to/from the railhead near Stone.
 - 4.5. Initial example pathing studies have been undertaken, which indicate that there is capacity on the existing rail network to support the required number of train movements at predicted levels. This analysis is based on the current network, timetable, and known freight movements. Hs2 Ltd will keep pathing capacity under review and further work is planned to be undertaken in advance of construction work commencing.
 - 4.6. Once complete, it is anticipated that these route and path studies will form the basis of a freight customer track access agreement application through the ORR under section 18 of the Railways Act 1993.
 - 4.7. The Stone railhead is designed to accommodate appropriate stockpiles of material to provide flexibility in the timing of the movements of freight trains serving construction of the Proposed Scheme. A conservative approach has been taken to the assumptions about freight loads. As construction planning develops the nominated undertaker will work with the rail industry to

understand whether there is an opportunity to increase loads, and hence decrease the number of train movements required.

- 4.8. Hs2 Ltd will work with the rail freight industry and Network Rail during the next stages of the Proposed Scheme to further develop the preliminary routing identified above.
- 4.9. The existing rail freight operating companies are well experienced in providing bulk freight movements in support of the construction and railway industries, and it is likely that Proposed Scheme's requirements will be seen as a significant commercial opportunity by the rail freight industry. HS2 Ltd anticipate working with the rail freight operators to establish appropriate detailed arrangements as the Proposed Scheme progresses, such that construction of the Proposed Scheme is able to maximise the benefits offered by rail freight.
- 4.10. The Bill does not seek powers to secure rail freight paths to support the construction of the Proposed Scheme. However, the analysis above, and the Environmental Statement which supports the Bill submission, assumes that the necessary paths will be available. There are a number of possible mechanisms by which the nominated undertaker could secure the necessary paths including:
 - by identifying free train paths within "white space" in the existing railway timetable, and negotiating a rail freight customer track access contract for such paths with Network Rail;
 - by procuring freight services from the existing rail freight operators on a commercial basis; and
 - by exception, in the absence of negotiated agreement with relevant rail freight operating company, to seek the re-allocation of unused freight paths in accordance with existing industry processes.

5. Changes to the classic rail infrastructure

- 5.1. There will be a need to modify existing railway infrastructure to accommodate the Proposed Scheme, which has the potential to impact on existing and future rail freight operations. For the Proposed Scheme these include:
 - creating a new connection from the Norton Bridge to Stone railway to the proposed railhead near Stone;
 - creating a connection from Proposed Scheme to the WCML south of Crewe; and
 - works in and around Crewe to facilitate the proposed future train service specification (including freight).
- 5.2. The Bill does not seek to disapply the Network Code, and hence HS2 Ltd anticipates that the standard railway industry processes of "network change" and "station change" will continue to be applied, together with the standard railway industry compensation processes. It is possible that the network change

processes could include the “complex projects procedure” where appropriate. Hence the rail freight operating companies will be consulted on the details of the proposals in the normal manner.

- 5.3. However, the principle of the changes to the conventional rail network required to facilitate the Proposed Scheme is established by the Bill, and hence it would not be appropriate for the Network Code processes to be used to block necessary works. The Bill provides that the ORR shall treat the “objective of facilitating the construction of Phase 2a of High Speed 2” as an objective of the ORR. If appropriate, the Secretary of State could also provide guidance to the ORR on this matter, in accordance with existing arrangements relating to the duties of the ORR. It is anticipated that, in the event that a “network change” necessary for the construction of the Proposed Scheme is not being progressed, this guidance could assist the ORR to facilitate the change occurring.
- 5.4. Further detailed design works and operational studies at Crewe will take account of Network Rail’s 2013 Freight Market Study, which is one of a suite of market studies that will underpin its long term planning process. It includes Network Rail’s freight demand forecast for 2023, 2033 and 2043.
- 5.5. HS2 Ltd recognises that both rail freight and passenger operators are likely to have aspirations to increase service levels, such that there is inevitable competition for any spare capacity.

6. The operation of HS2 classic-compatible services on the existing rail network

- 6.1. The Bill does not seek powers to provide track access rights for HS2 classic-compatible services to operate on the existing network north of Crewe or from the Phase One connection at Handsacre. However, it is anticipated that such classic-compatible services will operate. The rail freight industry will be consulted regarding HS2’s use of paths on the classic railway in accordance with standard industry processes.
- 6.2. Once the Proposed Scheme is opened, it is anticipated that six HS2 classic-compatible trains per hour (TPH) in each direction would join (and leave) the conventional network at Crewe, and one TPH at Handsacre. Predominantly, capacity for this will be from existing long-distance services being ‘diverted’ onto the HS2 network.
- 6.3. The Proposed Scheme is anticipated to release capacity between Handsacre and Crewe, over and above that released by Phase One. The use of this released capacity is expected to be determined via the existing industry processes (see Information Paper F5: Future Train Service Patterns on the West Coast Main Line Corridor).

7. Freight operations on HS2 infrastructure

- 7.1. The HS2 infrastructure has not been designed to accommodate traditional slow/heavy rail freight services. As a high speed, high capacity service, HS2 could not accommodate such traditional rail freight services without unacceptable detriment to capacity. A single rail freight path would require the removal of five high speed paths, or up to 5,500 seats per rail freight path.
- 7.2. HS2 Ltd has no plans for commercial freight services to operate on the network. However, it does not preclude the operation of relatively light / high speed rail freight services operating on a commercial basis outside the peak passenger hours. Such freight trains would need to be fully compatible with the HS2 infrastructure and classic rail infrastructure in a similar manner to HS2's proposed classic compatible fleet.

8. More information

- 8.1. More detail on the Bill and related documents can be found at: www.gov.uk/HS2