

HIGH SPEED TWO PHASE 2a INFORMATION PAPER

E8: VEHICLE FLOW MANAGEMENT AND SAFETY REQUIREMENTS DURING CONSTRUCTION

This paper outlines how large goods vehicle flows associated with the Proposed Scheme will be managed during the construction phase and includes how vulnerable users will be protected from them.

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.

The Helpdesk can be contacted:

by email: HS2enquiries@hs2.org.uk

by phone (24hrs): 08081 434 434
08081 456 472 (minicom)

or by post: High Speed Two (HS2) Limited
2 Snowhill, Queensway
Birmingham
B4 6GA

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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

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.

Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the Proposed Scheme have been reached.

2. Overview

- 2.1. The construction of a project on the scale of HS2 will require the removal and delivery of large quantities of materials throughout the main construction phase along the line of route. The project is founded on extensive use of construction haul routes along the alignment of the railway, to manage flow of construction materials without the need to pass along the public highway network. However, there will be use of the public highway network and this information paper outlines how construction vehicles associated with the Proposed Scheme using the public highway network will be managed.
- 2.2. It explains how use of permitted lorry routes approved by local planning authorities to and from work sites, and the volume of vehicles on specified routes, will be monitored. It also explains the vehicle and driver safety requirements, above the legal minimum standards, which will be adopted to protect vulnerable road users³.

3. Background

- 3.1. For this paper, construction traffic means all vehicles over 3.5 tonnes which are making deliveries of construction equipment or materials, or moving quantities of excavated material on public roads. Controls on the routes to be used by construction traffic will apply to large goods vehicles over 7.5t, where there are more than 24 movements to and from a site each day. These lorry routes are approved by the relevant planning authority, normally being the same as the authority responsible for the road network where the site is located. Overall vehicle numbers (including workforce private vehicle trips) will be considered when assessing the environmental impact of the project in accordance with the Environmental Statement.
- 3.2. HS2 construction vehicles and their impact on road safety will be managed, monitored and controlled by:
 - a vehicle monitoring system, to enable contractors to provide forecast and actual movement data as well as information on safety compliance;
 - vehicle flow monitoring, where there are specific restrictions on numbers of vehicles permitted to use a route;
 - vehicle identification;
 - driver training in vulnerable road user awareness, rural road driving and fuel efficiency;

³ In this paper, 'vulnerable road users' means: pedestrians, motor cyclists, pedal cyclists and equestrians.

- requirements for vehicle safety equipment and blind spot minimisation;
 - the implementation of fleet operator quality schemes; and
 - the implementation of route and flow monitoring, including monitoring that the driver and vehicle safety requirements are being met.
- 3.3. How these HS2 construction vehicle management, monitoring and control measures will be applied will be set out in a route-wide Traffic Management Plan which will be consulted on with the highway authorities along the line of the Phase 2a route.

4. Vehicle flows and road safety management, monitoring and control

- 4.1. For the main construction phase the nominated undertaker will implement a vehicle monitoring system which will:
- enable the nominated undertaker to manage and monitor the overall flow of construction vehicle movements and seek to avoid vehicles queuing on the highway;
 - enable the nominated undertaker to monitor the overall volume of vehicles passing any specific location during particular hours where required to ensure compliance with an undertaking or assurance; and
 - enable Principal Contractors to plan their scheduling of vehicle movements for each site in advance of arrival.
- 4.2. Principal Contractors will be required to use the system to advise the nominated undertaker of future planned vehicle movements to ensure that site capacities are not exceeded and that movements are only planned for permitted working hours as described in Information Paper D5 Working Hours.¹
- 4.3. Principal Contractors will enter into the system actual vehicle arrival times at construction sites and provide management information such as registration, vehicle type, operator, load type, utilisation, origin, driver details and vehicle safety equipment compliance.
- 4.4. The system will enable the production of reports covering adherence to plans, actual movement details and safety compliance.
- 4.5. The requirements and systems outlined above will also be used to ensure that Large Goods Vehicles (over 7.5t) only use approved routes. Technology such as automatic number plate recognition and GPS may be used to respond to complaints and verify compliance.

5. Vehicle identification

- 5.1. All vehicles over 3.5t regularly employed on construction will be required to display an A4 size identifier, stating 'HS2', inside the cab windscreen in a

position that does not obscure the driver's visibility. It should only be in use when the vehicle is on HS2 business.

- 5.2. The purpose of the identifier is to allow emergency services, stakeholders and the public to identify HS2 vehicles if the vehicles are off permitted routes, parked inappropriately, badly driven or involved in a road traffic incident.

6. Fleet operator quality plans

- 6.1. Principal Contractors will need to ensure that their heavy goods vehicle fleets operate in accordance with an approved and audited fleet quality plan, such as the Fleet Operator Recognition Scheme (FORS), DVSA's Earn Recognition or ISO39001.
- 6.2. Light van fleets can follow more appropriate quality plans, such as Van Excellence.

7. Driver training and vehicle safety

- 7.1. The Construction Logistics and Community Safety (CLOCS) standard is a voluntary standard that has been developed to protect vulnerable road users. Principal Contractors, and their supply chain, will be required to follow appropriate CLOCS requirements.

Driver training

- 7.2. Drivers need to undertake periodic training, to maintain their Certificate of Professional Competency (CPC). Drivers of vehicles over 3.5t who regularly attend any HS2 worksites must complete CPC training in vulnerable road user awareness, rural driving and fuel efficiency driving within time limits which will be set by the nominated undertaker. Driver training records will be entered on a suitable database for regular review by contractors and compliance monitoring by the nominated undertaker.

Vehicle safety

- 7.3. Vehicles over 3.5t regularly attending any HS2 worksite, as well as complying with all legal regulations and standards, will be required to have the following safety equipment fitted and in full working order at the start of each working day:
 - prominent signage warning other road users not to get too close to the vehicle (this will also apply to certain construction vehicles less than 3.5t);
 - side under-run guards on both sides, unless the contractor has demonstrated that site conditions mean that they are not capable of being fitted; and
 - blind spot minimisation, which may be a combination of Class IV, V and VI mirrors, a camera system for blind spots, audible or visual front nearside driver alerts and audible nearside left turn and reversing external warnings. Fresnel lenses will not be considered adequate for blind spot minimisation.

- 7.4. Vehicles over 7.5t used for the movement of mass spoil material must also have a four-way or 360 degree camera system fitted that can store up to two weeks' data and which may be viewed by the principal contractor on a 'just cause' basis.
- 7.5. Vehicles failing to comply with the above requirements will not be allowed on HS2 worksites, and drivers would be subject to suspension from all HS2 worksites.
- 7.6. Other vehicle safety standards will also apply and whilst failure to comply will result in vehicles being turned away from HS2 worksites, a driver suspension policy would not apply. The additional standards are that vehicles:
- Must not have any tinted windows;
 - Must have clean standard registration plates;
 - Must have a working beacon fitted;
 - May only carry passengers for the number of seats fitted;
 - Must not carry alcohol;
 - Must carry appropriate emergency aids, such as a first aid kit;
 - May not carry children or pets; and
 - Must have winter tyres fitted where and when it is a contractor policy for works vehicles.
- 7.7. Where appropriate, vehicle safety measures can be extended, so that as technology and vehicle design improves these could be adopted sooner by the project as a business case allows.

8. Monitoring of compliance

- 8.1. Prior to construction, Principal Contractors will be required to produce a Environmental, Sustainability and Safety Management Plan (ESSMP) which will set out how they will adopt:
- A quality plan for fleet operations with audit and annual re-inspection;
 - The project's driver training measures and what further measures, such as driver health management, they propose to adopt;
 - The project's vehicle safety measures and what further innovation they propose to adopt; and
 - Measures to reduce the environmental impact of construction, such as further improvements to fuel efficiency and reducing road noise.
- 8.2. Monitoring of compliance will be led by a dedicated monitoring and compliance team employed by the nominated undertaker.

- 8.3. The administrators of the vehicle monitoring system will review contractor performance and compliance with driver and vehicle safety, as well as ensuring that contractors comply with approved lorry routes and any relevant undertakings and assurances.
- 8.4. In addition, the compliance team will ensure that the nominated undertaker's policies and procedures are being adhered to.

9. More information

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