



# HIGH SPEED TWO PHASE ONE INFORMATION PAPER

## E30: 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 Bill for Phase One of the scheme which is now enacted. Although the contents were maintained and updated as considered appropriate during the passage of the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.

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 reached at:**

**High Speed Two (HS2) Limited  
Two Snowhill, Snow Hill Queensway  
Birmingham, B4 6GA**

by email: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

or by phone: 08081 434 434 (lines are open 24 hours a day)



# E30: VEHICLE FLOW MANAGEMENT AND SAFETY REQUIREMENTS DURING CONSTRUCTION

## 1. Introduction

- 1.1. High Speed Two (HS2) is the Government's proposal for a new, high speed north-south rail network. The proposal is being taken forward in two phases: Phase One will connect London with Birmingham and the West Midlands and Phase Two will extend the route to Manchester, Leeds and beyond.
- 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 November 2013, HS2 Ltd deposited a hybrid Bill<sup>1</sup> with Parliament to seek powers for the construction and operation of Phase One of HS2 (sometimes referred to as 'the Proposed Scheme'). The Bill is the culmination of nearly six years of work, including an Environmental Impact Assessment (EIA), the results of which were reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.4. The Bill is being promoted through Parliament by the Secretary of State for Transport (the 'Promoter'). The Secretary of State will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill.
- 1.5. This body is known as the 'nominated undertaker'. There may well be more than one nominated undertaker – for example, HS2 Ltd could become the nominated undertaker for the main railway works, while Network Rail could become the nominated undertaker for works to an existing station such as Euston. But whoever they are, all nominated undertakers will be bound by the obligations contained in the Bill and the policies established in the EMRs.
- 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 project have been reached.

---

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

## 2. Background

- 2.1. This information paper outlines how vehicles associated with the proposed scheme using the public highway will be managed. 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 users. These requirements include driver training, vehicle safety equipment and fleet quality management.
- 2.2. 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. 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 spoil on public roads. Controls on the movement of construction traffic will only apply to large goods vehicles over 7.5t, where there are more than 24 movements to and from a site each day. The safety requirements will apply to all construction vehicles and drivers regularly accessing the worksites, not just large goods vehicles.
- 2.3. Construction vehicles and their impact on road safety will be managed, monitored and controlled by:
  - a vehicle booking system;
  - vehicle flow monitoring;
  - vehicle identification;
  - driver training in vulnerable road user awareness and rural road driving;
  - 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.
- 2.4. In this paper, 'vulnerable road users' means: pedestrians, motor cyclists, pedal cyclists and equestrians.

## 3. Vehicle flows and road safety management, monitoring and control

- 3.1. The vehicle booking system 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;

- monitor the overall volume of vehicles passing a specific location during particular hours where required through an undertaking or assurance; and
  - enable principal contractors to plan their scheduling of vehicle movements for each site in advance of arrivals.
- 3.2. 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 movements are only planned for permitted working hours.
  - 3.3. Principal contractors will, through linked mobile devices, 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.
  - 3.4. The system will enable the production of reports covering adherence to plans, actual movement details and safety compliance.

## 4. Vehicle flow monitoring

- 4.1. A number of undertakings and assurances require that HS2 large goods vehicles or all construction traffic flows on specific roads do not exceed a specified hourly volume. Automatic Number Plate Recognition (ANPR) technology will be used on such routes, and the data checked against the vehicle booking system.
- 4.2. Mobile ANPR monitoring will also take place on roads which are not approved lorry routes to ensure that no more than 24 HS2-related large goods vehicles per day to or from a site are using the route, for example in response to complaints.
- 4.3. Certain fleet vehicles will also be required to use technology, such as Global Positioning Satellite vehicle tracking to enable compliance to be demonstrated over a wider area.

## 5. Vehicle identification

- 5.1. All vehicles over 3.5t 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 when off permitted routes, parked inappropriately, badly driven or when involved in a road traffic incident.

## 6. Fleet operator quality plans

- 6.1. Fleet operators of vehicles employed on HS2 construction will ensure their operation meets the standards of an approved, annual, independent fleet management audit. Such quality standards are the Fleet Operator Recognition Scheme (FORS) standard or, for non-UK operators, ISO39001. Other quality management plans may also be considered, so long as they address the themes

of the FORS standard and have independent auditing. Light van fleets can follow the Van Excellence code in place of FORS.

- 6.2. Prior to construction, principal contractors will be required to produce quality plans which will set out how they will adopt:
- a quality operation with audit and annual re-inspection;
  - driver safety measures;
  - vehicle safety measures; and
  - environmental impact measures.

## 7. Driver training and vehicle safety

- 7.1. The Construction Logistics and Cyclist 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 of vehicles over 3.5t who regularly attend any HS2 worksites must have been trained in vulnerable road user awareness on a course approved by HS2. Further training will be required regarding rural driving and fuel efficient driving.
- 7.3. The nominated undertaker will approve courses but principal contractors will be responsible for ensuring drivers in their supply chain are appropriately trained.
- 7.4. If, after a period of regularly driving for HS2 contractors, appropriate training has not been undertaken, the driver will be disqualified from attending any HS2 worksite until training has been completed.

### Vehicle safety

- 7.5. 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 site conditions mean that they are not capable of being fitted;
  - 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. Fresnal lenses will not be considered adequate for blind spot minimisation.

- 7.6. Vehicles over 7.5t used for the movement of mass 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.
- 7.7. Vehicles failing to comply with any of the above requirements will not be allowed on HS2 worksites, and drivers would be subject to suspension from all HS2 worksites.
- 7.8. 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:
- no tinted windows;
  - clean standard registration plates;
  - have a working beacon fitted;
  - only carry passengers for the number of seats fitted;
  - not carry alcohol;
  - carry emergency aids, such as a first aid kit;
  - not carry children or pets; and
  - have winter tyres fitted where it is an employer policy for works vehicles.
- 7.9. 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. Monitoring of compliance will be led by a dedicated monitoring and compliance team employed by the Nominated Undertaker.
- 8.2. The administrators of the vehicle booking system will review contractor performance and compliance with driver and vehicle safety, as well as ensuring that contractors comply with approved lorry routes and relevant undertakings and assurances.
- 8.3. In addition, the compliance team will ensure that HS2'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](http://www.gov.uk/HS2)