This paper outlines the construction timetable for Phase One of HS2, including an overview of the key stages and a timeline to the commencement of 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 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the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.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:

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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 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\(^1\) 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.

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\(^1\) The High Speed Rail (London – West Midlands) Bill, hereafter ‘the Bill’.
2. Overview

2.1. This paper outlines the construction timetable for Phase One of HS2, including an overview of the key stages and a timeline to the commencement of services.

2.2. The construction and commissioning of the Proposed Scheme project is expected to take place in stages between 2017 and the end of 2026, with some enabling works starting in 2016. The programme and planning assumptions for the construction is set out in Section 2 of each Environmental Statement Community Forum Area Report. The duration, intensity and scale of works along the route will vary over this period.

3. Timetable for construction of Phase One

3.1. The construction of the whole Phase One route will take approximately eight years, from the moment that site clearance work starts to the completion of railway installation. This will be followed by a period of testing and commissioning before the first services commence in 2026.

3.2. Most places along the Phase One route will only experience active construction for periods much shorter than eight years. For example, where there are no major structures, the period of active construction could be approximately two years prior to railway installation works. However, in some areas along the route, and at stations, construction will take longer.

3.3. For instance, the tunnels into London are expected to take up to five years to complete. During this period, railway land at Old Oak Common will be used to remove the earth being excavated. After the tunnels have been bored, there will be a period of tunnel fit-out including installation of track, overhead lines and electro-mechanical services (such as ventilation fans and communication equipment).

4. Key stages in the construction of HS2

4.1. An overview of the key stages involved in the construction of the Proposed Scheme are set out below.

Site clearance

4.2. During this stage, the nominated undertaker will take possession of the necessary land, set up construction compounds and clear the site ready for construction. Site Clearance includes enabling works and activities such as utility diversions or demolition of buildings.

Earthworks

4.3. Once the site is prepared, the nominated undertaker will start earthworks that will include excavating cuttings, building embankments and starting tunnel construction.
Civil engineering

4.4. With the general line of route established, the nominated undertaker will start to build the structures to support the railway. This would include bridges (over or under the railway), tunnels, viaducts, retaining walls and stations.

Railway installation

4.5. Finally, with the track bed prepared, the nominated undertaker will install the railway systems, including ballast, slab, tracks, signalling and the power supply. This stage will also include the final finishes to station buildings.

5. System testing and commissioning

5.1. The railway will be fully tested to ensure it can operate safely and reliably. Testing and commissioning will allow operational procedures to be tested and refined alongside the training of staff.

5.2. Testing will start on the section of route closest to the route-wide network control centre at Washwood Heath depot in Birmingham. This will allow the testing of train operating systems at the earliest opportunity. The period of testing and commissioning is expected to extend over four years, commencing in 2022 and completing in 2026.

6. Commencement of services

6.1. On current plans, passenger services for Phase One are expected to commence from 2026.

7. More information

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