

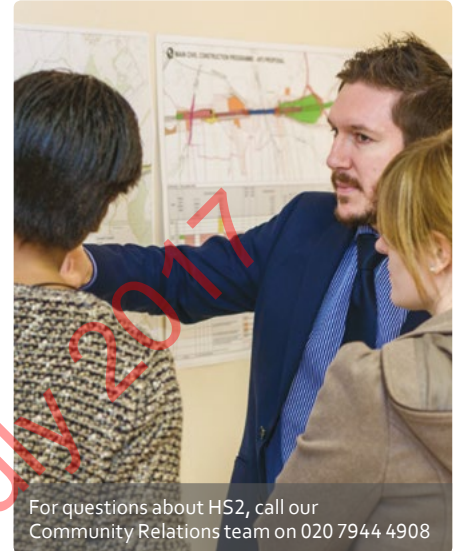
High Speed Two is the Government's planned new high speed railway. HS2 Ltd is the company responsible for designing and building the railway, and for making recommendations to the Government.

This factsheet is to update you about the operating requirements of HS2, such as speed, capacity and hours of operation, as well as the types of train that would run on the HS2 network.

HS2 guiding principles

To make sure that the UK reaps the full benefits of HS2, we have adopted the following guiding principles when designing the railway:

- HS2 would be used by high speed passenger trains only;
- HS2 rail services would serve long-distance, city-to-city journeys;
- benefits would be extended by running HS2 trains beyond the Phase Two network to existing stations further north; and
- HS2 must be well integrated with other transport networks ensuring door-to-door journeys are as fast and convenient as possible.



For questions about HS2, call our Community Relations team on 020 7944 4908

Between July 2013 and January 2014

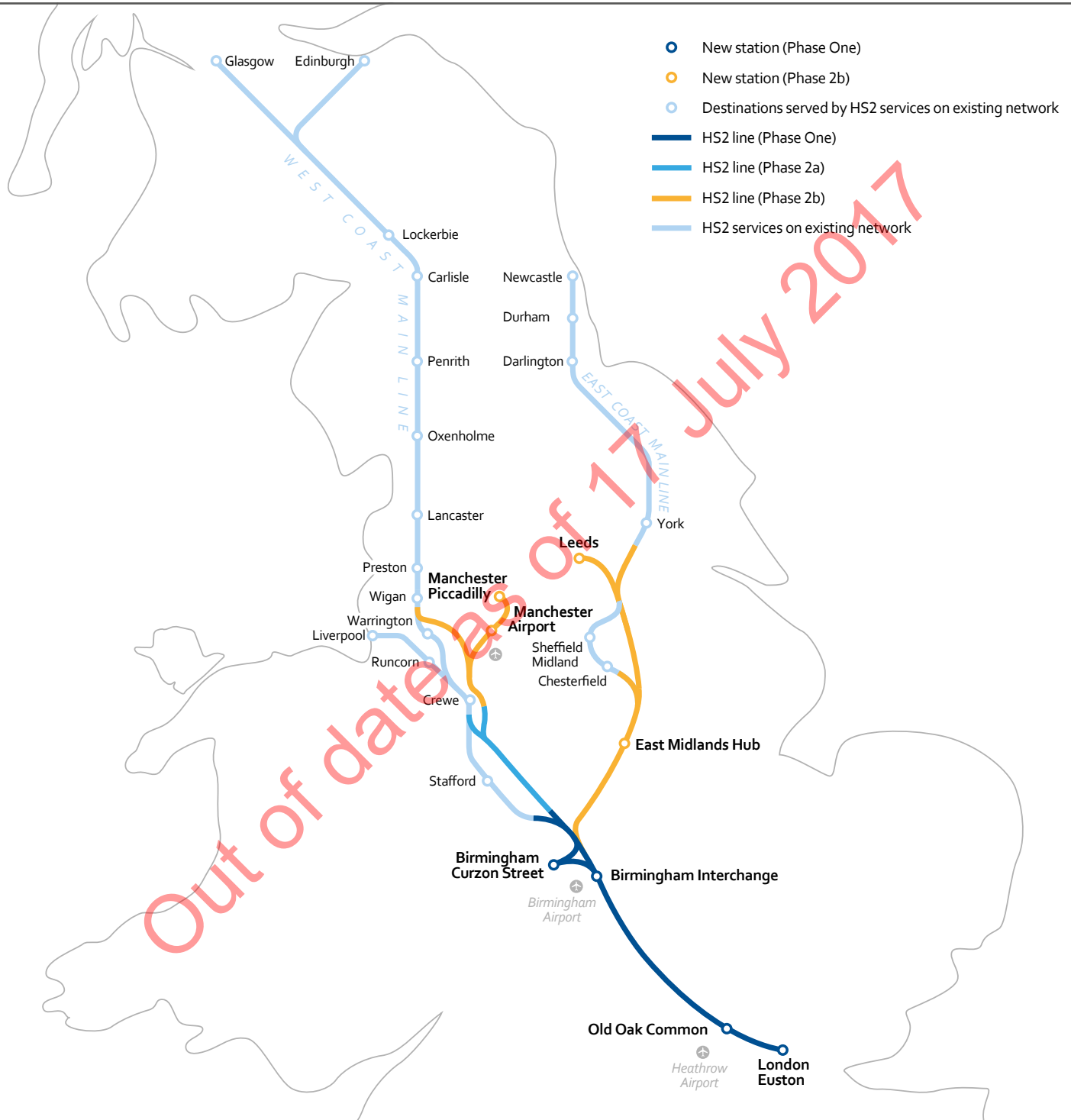
HS2 Ltd consulted the public on the proposed route and stations for Phase Two of HS2, from the West Midlands to Manchester, Leeds and beyond.

In November 2015

The Government announced its intention to bring forward the delivery of the Phase Two route between the West Midlands and Crewe, known as Phase 2a.

In November 2016

The Government announced proposals for the remainder of the Phase Two route, known as Phase 2b.



■ The HS2 network showing existing rail stations served by HS2 trains.

HS2 key operating requirements

Speed: To deliver quicker and more reliable journeys, we need to maintain high speeds wherever possible. The proposed scheme has been designed to enable speeds of up to 250mph (400kph), although the maximum speed on opening will be 225mph (360kph), which is consistent with current technology. In practice, services would operate at variable speeds – often lower than 225mph – along sections of the route, particularly when approaching stations and urban areas. This has been taken into account when calculating journey times. Trains in Europe and Asia already operate at up to 200mph (320kph). Operation at speeds above 225mph (360kph) is possible in the future, depending on assessments of the operational benefits and the suitability of the technology.

Capacity: The HS2 network would provide high-frequency high-capacity services for passengers only. Up to 18 trains per hour are planned to run in each direction between London and many of the UK's major cities, some of which could carry up to 1,100 passengers. The HS2 network is expected to carry more than 300,000 people every day.

Hours of operation: We expect HS2 services would operate between 05:00 and 24:00 from Monday to Saturday, and between 08:00 and 24:00 on Sunday. Maintenance and engineering work would normally take place outside of these hours, unless it can be performed without affecting services.

Train types

To maximise the number of trains that can run on the HS2 network, all trains would be designed for high speed and have the same operational characteristics such as maximum speed, rate of acceleration and braking. The maximum length of trains would be 400m, typically formed of two 200m units. However, single shorter train lengths would be deployed on some services depending on demand. The trains would be designed to include technologies which reduce noise emissions and also meet the European Technical Specifications for Interoperability (TSIs). 'Interoperability' is the ability of different systems to work together.

Two basic types of train are expected to operate on HS2:

Captive trains: 'Captive' trains would only be able to run on the newly built HS2 lines, and could be either single or double deck. They would be built to European dimensions, so they would be slightly taller and wider than typical UK mainline trains. These types of train are similar to the standard high speed trains already running in many parts of Europe.

Classic compatible trains: 'Classic compatible' trains would be built to fit existing UK railway infrastructure. This would allow them to be used as high speed services and continue beyond the HS2 network to existing rail destinations such as Sheffield, Liverpool, Newcastle, Glasgow and Edinburgh. They would be similar in performance to captive trains, but not be as tall or as wide. The Southeastern Javelin and original Eurostar trains used on High Speed One (HS1) are examples of high speed trains that are adapted to fit UK railway infrastructure.



■ A 'captive' high speed TGV train operating in France as an example of how a 'captive' fleet might appear.



■ A 'classic compatible' high speed Javelin train operating in the UK as an example of how a 'classic compatible' fleet might appear.

Keeping you informed

We are committed to keeping you informed via various channels



Residents' Charter and Commissioner

The Residents' Charter is our promise to communicate as clearly as we possibly can with people who live along or near the HS2 route. You can read it by visiting:

www.gov.uk/government/publications/hs2-residents-charter

We also have an independent Residents' Commissioner whose job is to make sure we keep to the promises we make in the Charter and to keep it under constant review. The first of the Residents' Commissioner's reports is published at:

www.gov.uk/government/publications/hs2-residents-commissioner-report-1-may-2015

You can contact the Commissioner at:

residentscommissioner@hs2.org.uk

Project updates

For more information about Phase Two, visit

www.gov.uk/government/collections/hs2-phase-two-from-the-west-midlands-to-leeds-and-manchester

And for details of events in your area, visit

www.gov.uk/government/collections/hs2-events

Contact us

HS2 Helpdesk

Tel: 020 7944 4908

Email: hs2enquiries@hs2.org.uk

Property and compensation

You can find out all about HS2 and properties along the line of route by visiting:

www.gov.uk/government/collections/hs2-property

You can also find out if you're eligible for compensation at:

www.gov.uk/claim-compensation-if-affected-by-hs2

Jobs and skills

To see what jobs are available on HS2 at the moment, check our careers page:

<http://careers.hs2.org.uk>

If you're a student wondering what careers in STEM subjects are like, check out articles and have a look around our Plotr World:

www.plotr.co.uk/careers/worlds/hs2

And if you're a business wondering how to get involved with HS2, have a look at our guides and updates on:

www.gov.uk/hs2 – search for *HS2 business*

This document may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard, please contact HS2 Ltd.