

HIGH SPEED RAIL:

EXPLOITING THE POTENTIAL



ABOUT THE HIGH SPEED RAIL GROUP

The High Speed Rail Group represents companies with experience and an interest in high speed rail, most of whom are delivering high speed rail lines all over the world. With this perspective our members know the enormous economic, social and environmental benefits that HSR can bring. They also know how to deliver to deliver HSR efficiently and affordably.

In the UK, HSRG members are building Phase 1 of HS2, investing to create world class supply chains. From civil and structural engineering, including designing bridges and viaducts that navigate complex terrains, to the use of artificial intelligence to optimise operations and enhance safety, the project has played a pivotal role in developing a supply chain with highly specialised knowledge and skills. Investment in HS2 means that the UK is now considered a leader in areas like off-site manufacturing for the construction industry, including minimising carbon emissions during construction and with exemplary environmental practices developed to mitigate the project's ecological footprint and preserve biodiversity on the line of route. Additionally, HS2 has positioned the UK as a key player in the international tunnelling industry, contributing valuable experience and capabilities to the global infrastructure sector. The project has fostered skills development and apprenticeships across all of these disciplines, nurturing the next generation of talent in the UK.

We stand ready to work with Government and other stakeholders to develop and deliver efficient and affordable plans for new lines in the UK which tackle this country's fundamental challenges to build a growing economy, spreading prosperity around our nations and regions, and meets the zero carbon imperative.

For more information about HSRG, please visit www.rail-leaders.com













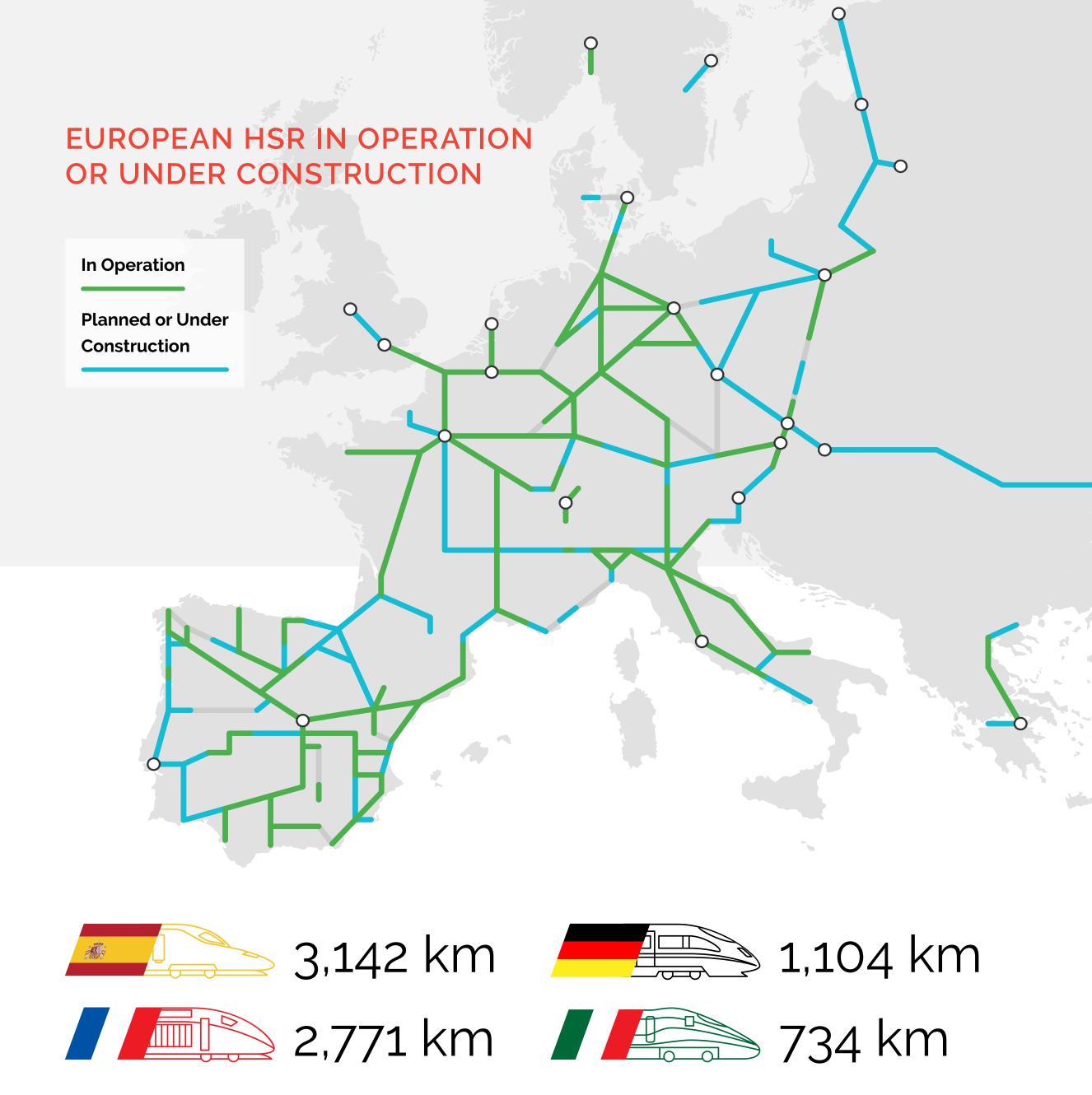
INTRODUCTION

Across the world, countries are recognising that a high speed rail (HSR) network is an essential component of a modern economy and society. All major political parties agree that driving economic growth has to be our national priority and HSR has a proven track record of driving growth and enhancing productivity all across the world, as well as offering a net zero carbon form of long-distance travel, and bringing countries together.

Motivated by these benefits, France has 2,771 km of HSR in operation or under construction. In Spain that figure is 3,142 km, in Germany 1,104 km, whilst in Italy there is 734 km of HSR either in operation or construction. Even relatively smaller countries such as the Netherlands and Belgium have HSR networks that serve the needs of their economies and societies. Outside of Europe, Japan and China have developed vast HSR networks, whilst Morocco has opened a 323 km long line, the first in Africa, with a line in Egypt under also under construction. Plans are being developed in the USA too.

Since the Government announced its plans to cancel to the "Northern Leg" of HS2 in October 2023, there has been much discussion and debate about the future of intercity connectivity in general, and high speed rail in particular.

This short report has been published to take stock and ask some straightforward but vitally important questions. Where does the cancellation of HS2 Phase 2 leave the development of Britain's HSR network? How do we better connect Birmingham to the North West, East Midlands and Yorkshire, and beyond that onto Scotland? And, fundamentally, how do we exploit the undoubted potential that the section of HS2 currently under construction gives us?





WHERE ARE WE NOW?

The present operating and in-construction high speed rail lines in the UK will give us the beginnings of a new inter-urban rail network for Britain.

We have, of course, HS1 which operates from London St Pancras to France, Belgium and the Netherlands, as well as providing high speed domestic services across Kent. Whilst HS1 is smaller than HS2 at 106km, it certainly provides big benefits. 11 million international travellers and 15 million domestic passengers use the service, which replaces 66,000 flights a year and removes 750,000 tonnes of carbon from the atmosphere each year.

We also have HS2 Phase 1 which is well into construction. Fully confirmed is the section from Old Oak Common in West London through to a new station in Birmingham, Curzon Street, including a stop at Birmingham Interchange adjacent to Birmingham Airport and the NEC.

The Government is committed in principle to finishing the section of HS2 from Old Oak Common through to Euston station in central London, albeit insisting this can be funded through private development.

There is no connection presently planned between HS1 at St Pancras and HS2 at Euston, even though the distance between the two stations is less than half a mile.

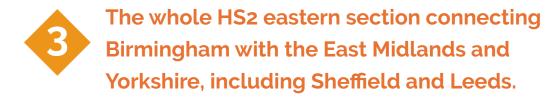
The map opposite shows the HS2 route has been scaled back drastically over the last few years.

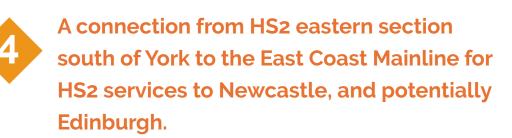
The following sections have been cancelled:



The Golborne Link connecting HS2 to the West Coast mainline at Golborne just south of Wigan, for HS2 services to reach Scotland and Cumbria.





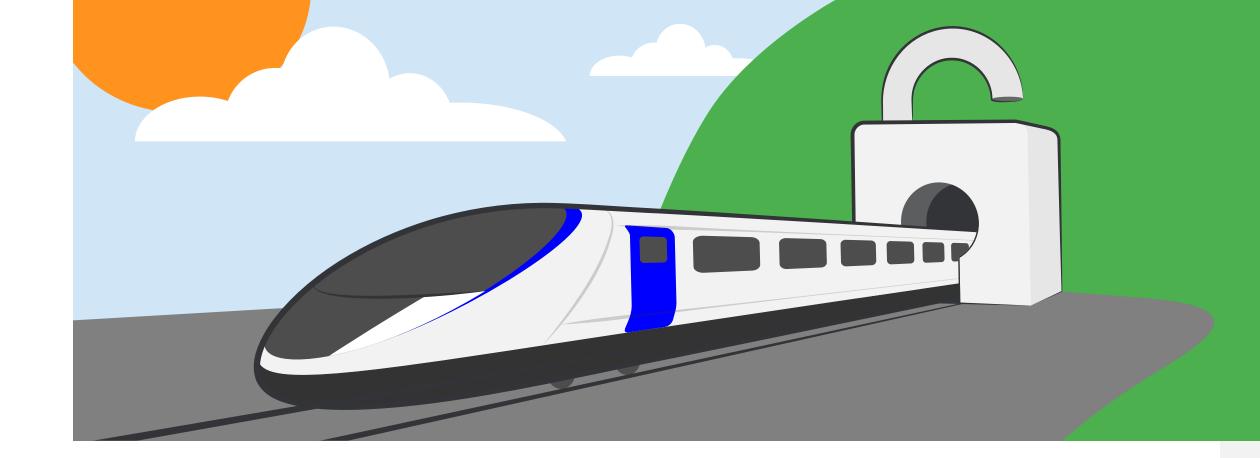


CANCELLED

UNDER CONSTRUCTION

COMPLETE





Whilst the debate around HS2 has been carried out with a great deal of heat and passion over recent years, in order to determine the right way forward it is useful to take a calmer step back and assess the strengths and weaknesses of what remains of HS2 and the beginnings of the network we are creating.

STRENGTHS



Economic Impact

There will be significantly faster rail services between London and Birmingham – which has already led to a development boost and additional economic growth in the West Midlands, estimated at £10bn of value over 10 years.



Unlocking Capacity

Phase 1 of HS2 releases capacity on the West Coast Mainline south. As well as potentially enhancing London-Birmingham connections, it could deliver 'released capacity' benefits to places like Watford, Milton Keynes, Rugby, Coventry and Northampton.



Most Challenging Section Nearly Complete

The most expensive and complex section of HS2 is that coming into London through the Chilterns and from the M25 in. This section is already deep into construction, meaning that future phases of HS2 are likely to be significantly less expensive on a cost per mile basis.



Freight Capacity

The truncated southern section of HS2 releases some capacity for planned rail freight growth, but only over short-medium distances between the West/South Midlands – London.

OPPORTUNITIES



Foundation for a National Network

The key strength of the 'status quo' plan as of today is that it provides the basis from which a new national network could be created. High Speed Rail reaches Kent and the Continent, and will go up to Birmingham and the West Midlands – albeit in all cases only from different stations in London.



Industry Growth

With 30,000 people working on the project, skills and capacity to deliver HSR has been built up within the UK industry, which is likely to drive down the cost of delivery for future lines and offer export opportunities in a growing world market.



HS1 and **HS2** Connectivity

Whilst there is no plan for a rail connection between HS1 and HS2, St Pancras and Euston are within 800 metres of each other and so passenger connections on-foot are straightforward.



Future Expansion Potential

Parliamentary consent and land ownership remains in place for what was called HS2 Phase 2a, meaning a plan to connect north from Birmingham could be re-ignited relatively easily.

GAPS



The North

Birmingham

Britain's Biggest Bottleneck

Building only HS2 Phase 1 creates Britain's biggest bottleneck between Birmingham and Crewe – akin to funnelling a motorway onto an A road and then onto a country lane. The 'workarounds' that will need to be developed to deal with this are likely to be costly and disruptive.

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HS2 Northern and Eastern Leg Removal

The removal of previously planned phases of HS2 means that Britain's second HSR "network" will only connect London with the South East and West Midlands leaving key regions such as the North West, East Midlands and Yorkshire, as well as Scotland and Wales, 'left-behind'.



Missing Link

There is no fully-designed, credible, deliverable and funded plan for the much-needed East-West connections across the north of England, connecting from Liverpool across to Hull via all the major cities of the north. Similarly, no plan exists to bring the East Midlands into the network.



Decarbonisation Strategy Void

Without a HSR network, there is no clear UK strategy to decarbonising long-distance interurban travel – in particular from Scotland to London.

CHALLENGES



Network North is not a Network

The Network North proposals, whilst including some worthwhile investments, fail to do the most important thing of all in transport planning – build a network. In contrast, they offer a piecemeal plan when a strategic approach is needed. Moreover, many are simply aspirations.



Investment Divide

The lack of HSR services to the North West, Scotland and elsewhere will inevitably make them much less attractive destinations for investment than London and Birmingham will be, exacerbating the UK's North-South divide.



Unfulfilled Promises to Scotland

Both the plan including HS2 Phase 2, and the new one without it, failed to deliver the long-standing commitment of the UK and Scottish Governments to deliver a 3 hour rail journey time from London to Glasgow and Edinburgh.



Euston Uncertainty

Whilst there is a clear and consented plan for Euston based on [11] platforms, the funding and timings remain unclear.



Skills at Risk

The skills and capacity built up by the industry will be lost if the construction of high speed lines does not continue beyond Phase 1 of HS2.



Rail Freight Growth at Risk

The prospects for rail freight growth (recently announced at +75% nationally by 2050) are damaged by the network constraints left north of Birmingham, limiting key longer distance freight flows between Scotland/North West England and the nation's major ports in South East England, and so damaging export trade potential. These freight movements are not best suited to continue by motorway (M6, in particular) in future as diesel power is phased out.

EXPLOITING THE POTENTIAL

It is clear that Britain needs to transform its national infrastructure to create a reliable and resilient network. This network could and should revolutionise the experience for passengers, transform our prosperity and productivity, meets net zero objectives, and brings our country together by lifting up left-behind regional economies whilst creating jobs and investing in our skills base. Over the long-term, this should reach all nations and regions of Britain.

Perhaps most importantly of all, the UK economy has been bedevilled by low growth for some 15 years. As a country, we are locked in a cycle of low productivity, low investment and low growth. Investment in HSR has a proven track record of improving productivity and needs to be an integral part of a UK growth strategy.

Based on the analysis in this paper, our existing and under construction HSR network, comprising HS1 and a truncated HS2 from London-Birmingham, gives us the platform to build this transformational national network which will drive economic growth in the century ahead. But on their own these lines are not enough. They fail to reach key cities and regions that need economic growth, leaving behind the north of England, Wales and Scotland yet again.

The next phase of the long-term task of building this new national network needs to transform connections from the West Midlands to the north of England and beyond. Since the decision made by the Government in October 2023, it has become clear that the new status quo plan creates a huge transport bottleneck north of Birmingham, will add to the pressure on the overloaded M6, and risks making travel from London-North West worse than it is today. The workarounds being considered appear to cost as much, or more, than the original plan, whilst causing huge disruption to passengers.

Long-term decisions are unlikely to be made before the upcoming General Election, but HSRG propose the following five point plan should be adopted by the next Government in order to deliver the long-term new national network the UK needs.



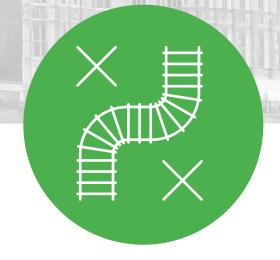








A FIVE POINT PLAN FOR THE NEXT GOVERMENT











Comprehensive Strategy

Develop, and stick to, a comprehensive long-term strategy for both North-South and East-West travel, prioritising the link from Birmingham to the North West, and the route across the north of England from Liverpool to Hull. Take advantage of existing parliamentary powers in delivering that, wherever possible, and also explore opportunities to commence construction in the north, again where feasible. Carefully consider the Street-Burnham plan to link Birmingham to Manchester Airport.

Funding Efficiency

Develop a funding model which allows the Euston station works to be completed and give immediate go-ahead to the section of HS2 from Old Oak Common to Euston, and in particular avoids any costly delays to the tunnelling work which will cost considerably more to deliver in future than if they are done now.

Land Management

Retain the present HS2 land-holdings and avoid a costly fire-sale of land until those long-term decisions have been reached, exploring all options to utilise existing Parliamentary powers to avoid undue delays or further adding to costs.

Explore Options for Investment

Engage widely with the infrastructure investment community to explore all options in terms of funding the future works, whilst recognising that the "cost per mile" of future phases is likely to be significantly less than that of HS2 Phase 1. Recognise that it is not 'all-or-nothing' with some assets, such as rolling stock and stations, lending themselves more easily to private finance than others, such as core civil engineering.

London-Scotland Connection

Recommit to the March 2016 plan agreed between the UK and Scottish Governments to work towards a 3 hour journey time from London-Glasgow/ Edinburgh, which would play a vital role in strengthening economic and social ties between England and Scotland, and achieving crucial decarbonisation objectives.



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