

## High Speed Rail: Investing in Britain's Future Greengauge 21 Position Statement

Greengauge 21 fully supports the development of a high-speed rail network for Britain and welcomes the Government proposals published for consultation in February 2010.

This Position Statement sets out Greengauge 21's response to the consultation and addresses the questions posed by Government in 'High Speed Rail: Investing in Britain's Future'.

### Question 1: Strategy and wider context

*Do you agree that there is a strong case for enhancing the capacity and performance of Britain's inter-city rail network to support economic growth over the coming decades?*

Greengauge 21 considers there is a compelling case for enhancing the inter-city rail network to deliver substantially increased capacity and improved performance. Evidence from Network Rail's Route Utilisation Strategies and the Department for Transport shows that additional rail capacity is needed to prevent overcrowding on rail services in the future. Without this additional capacity, travel conditions will decline, overcrowding will increase and services are likely to become more expensive, damaging the economic prospects of our cities and the country's economic competitiveness.

Other modes of transport – air and road – cannot deliver the additional capacity needed without unacceptable environmental costs and increased carbon emissions.

### Question 2: The case for high speed rail

*Do you agree that a national high speed rail network from London to Birmingham, Leeds and Manchester (the Y network) would provide the best value for money solution (best balance of costs and benefits) for enhancing rail capacity and performance?*

A national high-speed rail network would provide the best value for money solution to the capacity challenge. A new railway line will deliver a step-change in capacity and reliability that cannot be matched by upgrading the existing rail network. High-speed rail will release substantial capacity on the existing rail network for additional local and commuter services and for an increase in railfreight. It will provide the business connectivity that Britain will otherwise lack in the 21<sup>st</sup> century.

Providing a high-speed rail network will benefit passengers through substantially reduced journey times. Congestion and overcrowding will be relieved, journey time predictability enhanced, safety improved and overall carbon emission from transport will be reduced. A high-speed rail network will deliver transformational economic benefits to the country, in particular to the Midlands, the North and Scotland, and other regions, as the national network is completed.

Greengauge 21 supports the view that alternatives to the national HSR network that rely on upgrades to existing lines and operation at broadly existing speeds fail to provide

much of the benefit of high-speed rail and should be rejected. There is considerable evidence to support this: research carried out by Atkins for the Department for Transport in 2009 and 2010 and for the Strategic Rail Authority in 2003, Network Rail's New Lines Programme and Greengauge 21's own *Fast Forward* research programme in 2009.

### **Question 3: The Government's proposed network**

*Do you agree with the Government's proposals for the phased roll-out of a national high speed rail network, and for links to Heathrow Airport and the High Speed 1 line to the Channel Tunnel?*

According to Greengauge 21's research, there is an excellent case for a national high-speed rail network which will deliver economic benefits and improved connectivity across all parts of Britain. Greengauge 21 considers that there should be a long-term strategy for its delivery and implementation in phases – there are parallels with the planning and development of the national motorway network from the 1950s to the 1980s.

In September 2009, Greengauge 21 proposed a full national network in the *Fast Forward* strategy. The Government's proposed Y-shaped network between London, Birmingham, Manchester and Leeds can be regarded as a major stage towards such a national network. There is a strong case for high-speed railway lines to serve other parts of Britain: for instance the East of England, Scotland, Wales and the South West. Greengauge 21 takes the view that the national HSR network should ultimately link London with each of the eight 'core cities' in England, and Glasgow, Edinburgh and Cardiff.

The case for the first stage of the HSR network to be a new route between London and the West Midlands is strongly supported by Greengauge 21's own work and by other studies such as Network Rail's Route Utilisation Strategies and New Lines Programme. HS2 will relieve the West Coast Main Line which is the route expected to have the most severe crowding problems within the next 15 years.

The Government's proposed connection between the high-speed rail network and Heathrow Airport is welcomed. Greengauge 21's February 2010 report *The Heathrow Opportunity* set out how a high-speed rail connection to Heathrow could be developed in a way that delivers best value for money and provides wider benefits across the South East, South West and South Wales.

Greengauge 21 also welcomes the proposed direct connection between HS2 and HS1 to enable through running of services between the two HSR lines. The provision of direct HSR services between cities in the Midlands and the North of England to continental Europe is important. The role that Stratford International station could play in ensuring that services using the connection between HS1 and HS2 represent value for money requires proper assessment.

It is recognised that there are good reasons why Government is proposing to seek Parliamentary Powers for HS2 and not the full Y-shaped network, since extending the timescale for planning and delivery of HS2 would be undesirable. Greengauge 21 urges that consideration is given to ensuring that there is an appropriate commitment to the development of a 'truly national HSR network', as set out in the Coalition Agreement. This may be achieved through, for example, a National Policy Statement for transport infrastructure and through appropriate wording and provisions in the Parliamentary Bill for HS2.

**Question 4: The specification for the line**

*Do you agree with the principles and specification used by HS2 Ltd to underpin its proposals for new high speed rail lines and the route selection process HS2 Ltd undertook?*

The principles and specification used by HS2 Ltd for the development of high-speed rail lines in Britain is appropriate and in line with international best practice. It will allow Britain to make good use of tried and tested technology while leaving scope for anticipated technological development.

Specifically, Greengauge 21 considers it right to design HS2 for a maximum speed of 400km/h (250mph), as it would be a mistake not to provide for the likely evolution in HSR technology. The Government's stance that trains will be operated no faster than 360km/h (225mph) until advances in technology mitigate any impacts from faster operation is welcomed.

We believe that the energy, carbon and sustainability argument is an important feature of the case for HS2, and that it is also right that HS2 Ltd shows some flexibility on design speeds in highly constrained areas, such as on the approaches to urban centres. The implication of the Government's targets on de-carbonising the generation of electrical power that will be used by HS2 is that in future the carbon impacts of HS2 operations will decline. This will reduce the impact from operation at the higher end of the likely operating speed range.

A sound route selection process has been developed and undertaken for HS2. We believe that the specification needs to be extended to assess the implications for the classic network north of Lichfield so that the benefits of HS2 can be fully realised from its planned opening in 2026.

**Question 5: The route between London and the West Midlands**

*Do you agree that the Government's proposed route, including the approach proposed for mitigating its impacts, is the best option for a new high speed rail line between London and the West Midlands?*

The Government's proposed route for HS2 is welcomed. Greengauge 21's research indicates that it is essential for high-speed railway lines to serve city centres directly, as achieved by the Government's proposals for both London and Birmingham. This will allow passengers to access HSR easily by public transport and other sustainable modes, and it also delivers economic regeneration benefits in the city centres. The proposed route does not incorporate intermediate stations between the London and West Midlands areas; studies have demonstrated that this is sensible, including in terms of local planning impacts.

Government proposes that the HS2 scheme incorporates a good connection to the existing railway network, the West Coast Main Line, to allow through services to operate to London from Manchester, Liverpool and Glasgow. This connection has been planned from the outset and is essential to the overall value for money case. It should be used to support the operation over HS2 of services from Edinburgh as well as Glasgow.

Greengauge 21 believes that the specification of HS2 should also include a connection to the existing Birmingham to Derby railway and onwards to the Midland Main Line. This would allow through high-speed services to operate to London from the East Midlands, Sheffield, Leeds and Newcastle, further widening the benefits from the first stage of HS2.

While Euston station is considered to be the right location for the London HS2 terminal, there may be ways of mitigating some of the impacts of HS2 at Euston beyond the current Government proposals. Specifically, the incorporation of the West Coast Main Line 'slow lines' services into Crossrail (as identified by Network Rail in its Route Utilisation Strategy programme) through the provision of a short new connection would substantially relieve the London Underground network at Euston and obviate the need for other more expensive capital solutions. This could also reduce the scale of works needed at Euston and the timescale for their implementation and is likely to improve the overall value for money case. The use of cross-linked 'regional express' networks such as Crossrail is a tried and tested mechanism to create terminal capacity for HSR at reasonable cost. It has been used in Paris, for example, through the creation of its RER network, for its TGV terminals.

Greengauge 21 notes that demand forecasts prepared to underpin the development of the HS2 scheme are conservative compared with recent historical evidence on rail demand and with studies carried out by organisations including Greengauge 21 and Network Rail. The HS2 business case is therefore cautious and, even though it already shows good value for money, Greengauge 21 considers the case to be understated.

#### **Question 6: Appraisal of Sustainability**

*Do you wish to comment on the Appraisal of Sustainability of the Government's proposed route between London and the West Midlands that has been published to inform this consultation?*

Greengauge 21 notes that the Appraisal of Sustainability has been carried out to assess the impacts of HS2 at an early stage of scheme development, and it is therefore a useful analysis to inform stakeholders. A full Environmental Impact Assessment will provide further detail in due course if the Secretary of State for Transport decides to continue with the development of HS2 following the public consultation.

The Appraisal of Sustainability includes estimates of jobs created by HS2. These estimates relate to direct effects, such as from construction, and to those expected to be generated at development sites around HS2 stations. Greengauge 21's evidence suggests that there will be much wider effects on employment because of the increased productivity across cities and regions that HSR will serve. The Appraisal of Sustainability estimates are therefore only a subset of the full employment effects of HS2.

The analysis of carbon impacts of HS2 in the Appraisal of Sustainability does not reflect the future decarbonisation of the nation's electricity supply that needs to take place to meet carbon reduction targets. High-speed rail's carbon performance will therefore improve substantially in future. Analysis by ATOC for Greengauge 21 demonstrates that a journey by high-speed rail today generates only one-third of the CO<sub>2</sub> emissions of a comparable car journey and one-quarter the emissions of a comparable journey by air; the advantage of HSR will only improve on this advantage in future.

**Question 7: Blight and compensation**

*Do you agree with the options set out to assist those whose properties lose a significant amount of value as a result of any new high speed line?*

Greengauge 21 has no comment on the Government's approach to blight and compensation arrangements, but welcomes the opportunity provided to those who may be affected by HS2 to comment on the proposals at this early stage.

**Greengauge 21**

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