

The delivery of a High Speed Rail (HSR) network supports a more structured transport strategy for the nation. It will free up capacity on the existing congested rail network and help regenerate and boost the economies of our city-regions, therefore benefitting the UK as a whole, according to the Institution of Civil Engineers (ICE).

In its response to the High Speed Rail: Investing in Britain's Future consultation – which drew upon the expertise of civil engineers from across the UK - the leading engineering body said it had considered alternatives to the new network carefully, but believed HS2 was more visionary, bringing about a real step change in rail capacity and encouraging long term economic growth.

Chair of ICE's HSR working group, Steven Hayter, said: "The opportunity should be taken to invest in growth by providing a new railway that is fit for the 21st century – significantly increasing capacity, strengthening connectivity between Britain's city-regions and linking up with the Trans-European rail network. The time to invest is now, and we endorse the Government's strategy.

In addition to better connectivity between regions, the benefit of improved connectivity to the capital should also not be understated, he added. "Faster, more reliable connections to London could propel a city-region's economic competitiveness and act as a catalyst for regeneration as city developers, planners and businesses alike take advantage of the opportunities – especially in the Midlands, the North and Scotland.

"But we believe the benefits are not limited to those cities served by HS2. Many will benefit from released capacity and significantly improved services on the existing lines, such as communities that are currently not well served by the West Coast Main Line. Those not directly served by HS2 will also benefit from reduced journey times providing their nearest HS2 station is easily accessible by road or public transport. The key to growth is in the regions' hands - they are best placed to devise how to use this infrastructural asset to their advantage and ensure economic development is evenly spread."

Hayter stressed however, that while the HS2 proposals open up significant economic opportunities and present good value for money, the business case must continue to be reviewed as the proposals develop. Additionally he urged Government to ensure the UK wide benefits are realised, by committing to the full 'Y' shaped route extending to Leeds and

Manchester and by giving serious consideration to future extensions to other key UK cities.

ICE also called on the Government to ensure careful thought is given to the route's connection points to the existing network and the costs involved in providing extra capacity at terminals. In particular, how the London Underground lines will cope with the 80,000 additional passengers, each day, that HS2 will bring into Euston station and whether the proposed single track route linking HS1 and HS2, set to operate in the same corridor as the North London line, could cause further congestion to that commuter service and potentially cause delays to HS2 services.

Finally, it urged Government to maximise the environmental potential of HS2, by ensuring that in future decades, UK grid electricity is increasingly generated by low carbon sources.

Hayter said: "The trains that would be used on the HSR network will be powered by electricity and in the long term, as grid electricity generation becomes greener, HS2's carbon impact will be further reduced. The scale of this reduction however, is fundamentally dependent upon the UK's future electricity generation policy. Government must take action now."

Concluding, he added: "Clearly a robust and effective high speed railway that achieves the environmental and economic aims and is fit to serve the nation's future transport needs, depends on the very strongest commitment going forwards, both politically and financially. ICE stands ready to assist and help address any issues which may improve the delivery of this important infrastructure project."

Key ICE recommendations:

ICE supports the HS2 proposal, however:

To ensure the UK wide benefits are realised, Government must commit to the full 'Y' shaped route extending to Leeds and Manchester, which will provide the basis for future extension to other key UK cities.

The Department for Transport must work closely with Local Transport Authorities to ensure local transport solutions are integrated with HS2 plans.

Government must give careful consideration to the route's connection points to the existing rail network and the costs involved in resolving potential issues.

Government must maximise the environmental potential of HS2 by ensuring that in future decades, UK grid electricity is mainly generated by low carbon sources.

Government should consider if parts of the HSR route could be opened earlier as sections of the line are constructed. This will allow for the track and trains to be tested prior to the full route launch, and for passengers and freight to reap the additional capacity benefits as early as possible.