

# POLITICS, REASON AND THE ART OF HIGH SPEED RAIL

**Chris Day**  
City of Edinburgh Council

## INTRODUCTION

During 2011 the Government will consult on its proposals for a High Speed Rail network between London and the north, including Scotland. Potentially the major transport and engineering project for a generation, 'HS2' is likely to be constantly in the news throughout 2011.

This paper reviews the history of HS2, the implications and issues for Scotland, and gives an up-to-date overview of where the project stands at the time that STAR 2011 takes place. The paper is sourced on the author's experience of promoting High Speed Rail for Scotland.

The history of HS2 is analysed as a partly political, partly technical process. The implications and issues for Scotland include a brief description of the case for Scotland and an analysis of the risks and opportunities to Scotland arising from Westminster's proposals and the Scottish Government's response. The overview of the project reflects the start of Westminster's consultation. The consequences of the Scottish election one week before the STAR conference may be considered in the conference presentation.

### **A short description and history of High Speed Rail**

'High Speed Railways' operate at more than 150mph, and usually over 185mph, on new or substantially improved infrastructure with rolling stock purpose-built for prolonged high speed running. Operating speeds have gradually increased; the benchmark is now at least 185mph, and possibly 220mph, on lines under construction.

Japan's Shinkansen (first operating from Tokyo to Osaka in 1964) is generally considered to be the first High Speed Railway. Although initially operating at less than current speeds, it comprised the first purpose-built, segregated infrastructure and rolling stock. However, it was a lack of capacity on existing lines, not faster journeys, that was the driving force behind it, aided by the high population density of the Tokyo-Kyoto-Osaka corridor, and the problems of road transport in a narrow, mountainous, earthquake-prone archipelago.

France followed in 1981 with the TGV. Unlike the fully segregated Shinkansen, TGVs also use parts of existing routes and stations.

High Speed Lines (HSLs) have been, or are currently being built in Japan, France, Germany, Belgium, the Netherlands, Spain, Italy, Taiwan, Russia and South Korea. Vietnam, India, Portugal, Saudi Arabia, Iran, Brazil, Morocco, Argentina, and the USA are planning HSLs. China, which in 2006 had no HSLs at all, has now opened 2,000 kilometres of HSL and plans over 9,000 kilometres more by 2012 and perhaps a final network of 25,000 kilometres.

Other factors (including national prestige and establishing improved links between regions of the country) have crept into more recent High Speed projects, although they are rarely viable where capacity is not a problem.

The Channel Tunnel Rail Link is the only such route in the UK. In the 1980s, when other countries were planning new routes, British Rail initially put its faith in the tilting Advanced Passenger Train, which would have connected London and Glasgow in 4 hours 10 minutes. This time was unbeaten until 2007 when a Virgin Pendolino managed it in just under 4 hours. Whilst the APT was cancelled, the 'stop-gap' Intercity 125 prospered, together with gradual upgrades of existing lines, so that the UK developed probably the most extensive network of 125mph routes anywhere.

The example of the French TGV prompted calls for a British equivalent since at least the early 1990s. A scheme featured in the Labour Party's manifesto in 1992, but disappeared from view when the Party failed to win the general election that year. A lack of capacity was not a significant problem in the UK until passenger numbers began to take off after the millennium. Furthermore, the relatively extensive British 125mph network meant that journey times were not a major political issue.

Through the 1990s political and organisational energy was focussed on privatising the railways in mainland Britain. Hatfield and its aftermath preoccupied the industry in the early years of the new century. The Channel Tunnel Rail Link, originally planned as a public-private partnership in line with government thinking at the time, had to be rescued by the government, costs having doubled.

But the HSR lobby was growing. For example, since 1999, the City of Edinburgh Council's Local Transport Strategy has included a commitment to press for significant reductions in journey times between Edinburgh and the south. Nevertheless, the HSL lobby suffered from a lack of clear leadership, and a tendency to argue for different (and sometimes contradictory) goals. It also suffered from confusion over the nature of High Speed Rail across the UK. In Scotland, which has most to gain from faster journeys south, the Glasgow-Edinburgh 'Bullet Train' idea, which gathered some media interest, rather missed the point.

However, in 2003, the consultants Atkins completed research for the former Strategic Rail Authority, examining the transport and business case for a new high speed line from London to the north. Atkins reported that when new capacity is required, a new HSL performs better in economic, safety and accessibility terms than the alternatives (upgrading existing networks, new lower-speed lines, or highway upgrades), and could reduce domestic air travel growth.

This established important basic principles for High Speed Rail in the UK; using existing routes into city centres, and connecting with the conventional rail network at city centre stations. It favours a system more like the German than the French TGV network, which tended to use new stations in suburban

areas or the countryside (nicknamed 'beet stations', after one surrounded by sugar beet fields).

In 2006, Sir Rod Eddington reviewed transport in the UK for the Westminster government. Although media coverage at the time claimed that he had killed off the HSL concept, he subsequently told the House of Commons Transport Committee that he was opposed to an approach based on magnetically levitating trains, not 'wheel on rail' High Speed trains.

Whilst other countries continued to plan new lines, progress in the UK had more in common with the USA, where the Clinton Administration had proposed a High Speed Rail Development Act to study the issues and provide seed money, although various proposals came and went until the Obama administration committed to significant funding for a number of State-led schemes.

Politicians and civil servants north and south of the border were cautious. But 40% growth in rail travel in ten years led railway insiders to the view that, whilst a tweak here, a bit of money there, and perhaps an economic downturn may buy some time, a capacity crunch would eventually hit the network. The view goes that there are two solutions; pricing passengers off the railway (contrary to a host of other priorities), or major new infrastructure. The Chief Executive of Network Rail came out in favour of the north-south HSL concept in May 2006.

Yet the UK government gave no priority to High Speed Rail, or even electrifying existing lines. Perhaps a turning point was reached when one government publication on the future of the railways was criticised, if not ridiculed, within the railway press as superficial, naïve and unrealistic. Within the tenure of one Secretary for State (Ruth Kelly), the official mood switched from utter non-interest to 'perhaps, in some circumstances'.

The completion of the Channel Tunnel Rail Link on time and on (revised) budget, with an impressive terminal at St Pancras, was, unusually, an undisputed success for the railways in 2007. Overcoming its earlier difficulties, and renamed 'High Speed 1' (begging the question about High Speed 2) it is now seen as a commercial success. It seems to have generated debate about the possibility of connecting British cities to each other in the way that London was now connected to Paris and Brussels.

In October 2007 the white paper Towards a Sustainable Transport System included HSR as a possible option for the London-Birmingham-Manchester corridor. The Department for Transport asked Network Rail to examine options for Britain's main rail corridors. Thus, in the following month the House of Commons Transport Committee reported more favourably on the prospects for HSR.

In 2008 Greengauge 21, which researches and develops the concept of a UK High Speed network and promotes its implementation, began to recruit the support of key organisations along a south to north axis (having launched a

manifesto in 2006 and published a report in 2007). The Institute of Civil Engineers called for a national HSL project, along with a host of other groups.

In 2008, the Conservative Party committed itself to a High Speed network when if it came to power, and a Cabinet reshuffle brought about a rare creature; Andrew Adonis, a railway minister who was interested in the subject, with vision and the intellectual firepower to make it happen. High Speed Rail was high on his agenda (though not to the expense of everything else), and he was subsequently promoted to Secretary of State.

Adonis stimulated the HSR debate, and in 2009 established High Speed 2 Ltd, with the initial remit of planning a High Speed Line between London and Birmingham; this was soon extended to include developing concepts for a wider network. The Government claimed that the London-Birmingham line had been proved to be the best option for addressing an impending capacity constraint across all modes of transport between the cities. Organisations such as Greengauge 21 were establishing a positive working relationship with the DfT.

There was a wider context in which Network Rail was flagging that the West Coast Main Line would run out of capacity within a few years, notwithstanding the ongoing West Coast Main Line upgrade, and that other main lines would soon follow suit. The history of the WCML upgrade, at considerably greater expense than initially projected, with less capability than originally planned, and inevitable major disruption while working on a live railway, convinced many in the industry that the way forward was new infrastructure rather than attempting major upgrades.

In 2009 Network Rail published the first outcome of its 'New Lines' study, soon followed by Greengauge 21. Both indicated the case for a HSR network (though different in scale), if not its necessity to overcome future capacity constraints. By this time, however, HS2 was working to a specific brief, and whilst Network Rail's proposal in particular garnered some media interest, there was a sense that the world was moving on. Perhaps the greatest impact was to stimulate a reaction to the prospect of HSR serving only the Birmingham/Manchester/Liverpool regions. Very soon demands and further studies were emanating from Yorkshire and north east England, designed to ensure that they were not excluded from future plans.

HS2 Ltd submitted its findings to Andrew Adonis in December 2009. The headline outcomes were well trailed in the meantime, so the Government's response, in a Command Paper in March 2010, contained few surprises. It offered a detailed alignment between London and Birmingham, and identified two extended lines to Manchester and Leeds. HS2 was instructed to proceed with further work.

The publication of this paper marked the beginning of a popular campaign against the HS2 proposals, primarily by interests on the line of route.

However, a change of government in May 2010 did not provoke a fundamental review of the scheme. Both parties forming the new Coalition

Government at Westminster already supported the HS2 concept. Specific issues were reviewed, in line with previous Conservative Party statements. In particular, the routes of the Manchester and Leeds extension, and issues associated with serving Heathrow and HS1 were reexamined (though the last two reviews had already been commissioned by the previous government).

Notably, the scheme survived a Comprehensive Spending Review despite severe pressure on government finances. Of course the bulk of spending will not fall within the current Parliament; but it benefits from coinciding with completion of the London Crossrail project, the only transport project approaching the same scale.

A new enthusiasm for progressing transport investment during and despite economic recession appears to have become an extra rationale for the project; whether as a means of ensuring that transport infrastructure contributes to future growth, or perhaps even as a latter-day 'New Deal' kind of activity.

Subsequent announcements in October and December indicated that the new government had fundamentally accepted its predecessor's scheme. Some detailed alignment changes where there was local opposition, were comfortably within the scope of a plan that was still at a relatively early stage. The government accepted that a direct link to Heathrow would not be built in the first phase, and that Manchester and Leeds are best served by separate routes north of Birmingham. A direct link between HS1 and HS2 was perhaps the most significant change. HS2 had been notably unenthusiastic about such a link; its review documents, if perhaps not through gritted teeth, bore the mark of government policy.

Almost unnoticed, Network Rail published its Route Utilisation Strategy for the existing West Coast Main Line in December 2010. This stated clearly that expected growth in short and long distance passenger and freight traffic cannot be accommodated without the diversion of substantial long-distance passenger services to a new line. This was a clear message to those critics of HSR who have argued that it would be better to upgrade what is already there.

A review of capacity on the East Coast Main Line, published in the same month, concluded that stakeholders' realistic aspirations after 2016 might be achieved up until the medium term, but probably required a return to the co-ordinated timetable planning of British Rail. Network Rail appears to consider that 7 long distance paths per hour is deliverable, but much more than that poses a major challenge; and the franchised operator has a claim on 5 of them, whilst existing open access operators are keen to expand their operations.

Quietly, via a passing reference in its draft London and South East Route Utilisation Strategy, Network Rail indicated that the second phase of its 'New Lines' study had found that there was a case for a new line to Leeds and the East Midlands to be taken forward.

The formal public consultation on HS2 was due to begin in late February 2011.

## What's the business case for HSR?

Four significant studies<sup>1</sup> into High Speed Rail have been completed by highly credible transport planning organisations. Their findings vary because each had different objectives, which prioritised different benefits and designs. However, key findings reinforce the case for Scotland's early inclusion in a UK network because of the economic and environmental benefits.

**Atkins**<sup>2</sup> 'full network option' serving the east and west sides of the country and running to Glasgow and Edinburgh delivered:

- a BCR of 2:1, compared to a BCR of 1.7:1 for HSR London-Birmingham only
- economic benefits around £63bn, compared to £16bn London-Birmingham
- productivity benefits over £44bn (compared to £16bn), excluding significant effects of improved regional rail services enabled by HSR
- agglomeration productivity benefits for Scotland of £7.3bn (compared to £2.3bn)

**Network Rail**'s<sup>3</sup> preferred option, a high speed line to Glasgow and Edinburgh with spurs to Birmingham, Liverpool, and Manchester assumed 200mph operation. This delivered:

- Wider Economic Benefits (WEBs) of £3-6bn
- crowding relief (to classic rail users) worth £0.6bn
- CO2 reduced by almost 300,000 tonnes/yr by 2030 (air, car, lorry)
- vehicle km reduced by 673m (car) and 71m (freight) by 2030
- air journeys reduced by 3.6m/yr

**Greengauge 21**<sup>4</sup> proposed the most comprehensive HSR network, with the best benefit:cost return, despite it normally being the case that beyond a certain network size, returns shrink as the 'low-hanging fruit' are picked early on.

GG21's H shaped network assumes 200mph operation and a London-Scotland journey time of 2hr 40mins and delivered:

- total network BCR of 3.5:1
- WEBs add 13% (£14bn) to transport benefits. The WEBs are well distributed: 36% to the Midlands and North England, 35% to the wider South East and 26% to Scotland
- wider impacts for Scotland of £19.79bn over 60 years
- CO2 reduction of 1m tonnes/yr by 2055 with the full H network

---

<sup>1</sup> Atkins study for the SRA and 2008 update ('Transport Matters'); Network Rail 'New Lines' study, 2009; Greengauge 21 'Fast Forward', 2009; HS2 Ltd and government papers, 2010

<sup>2</sup> Atkins was commissioned to study the feasibility of a north - south HSL.

<sup>3</sup> Network Rail's study was designed to identify how to relieve congestion on the WCML

<sup>4</sup> Greengauge sought to deliver an HSR network for the UK

- modal switch from air travel; the London - Glasgow/Edinburgh rail market share increases from 26% to 88%
- car trips reduced by 13 million in 2055
- air trips reduced by 30m/yr by 2055 (if no capacity constraints at airports)

The BCR of the Manchester-Scotland section is striking compared with the rest of the network, at 7.6:1, and the incremental benefits of extending a line to Scotland have a total NPV £23,229m (2002 prices)

#### Benefits of sections of route

New HSR infrastructure	London-Birmingham/Manchester	Manchester-Glasgow/Edinburgh	London-Leeds/Newcastle	All
Benefit:Cost Ratio	2.9:1	<b>7.6:1</b>	2:1	3.5:1
NPV (£bn, 2002 prices)	24	23	15	63

GG21's summary of demand in 2055 also demonstrates that extending the High Speed Line from the Birmingham-Manchester corridor to Scotland produces:

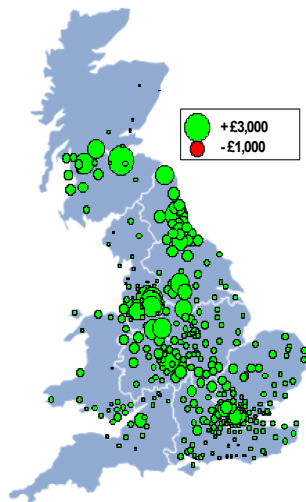
- the smallest proportion of passengers shifting from classic rail to HSR
- the largest proportion of passengers shifting from air to HSR
- similar proportions of passengers shifting from car to HSR on all route sections
- the smallest proportion of generated demand

#### (GG21) Summary of HS demand in 2055 (m. passengers/yr)

	Total	Abstracted from classic	Abstracted from air	Abstracted from car	Generated users
London/Heathrow/HSCT - Birmingham/Manchester	72	48 (66%)	8.2 (11%)	3.9 (5%)	11.8 (16%)
London/HSCT - Sheffield/Leeds	51.6	36.5 (71%)	3.4 (7%)	2.6 (5%)	9.2 (18%)
Extend HSNW - Scotland	28.8	9.5 (33%)	15.6 (54%)	2.1 (7%)	1.6 (6%)

KPMG<sup>5</sup> showed changes in average wages following construction of HSR, comparing a scenario with no HSR at all with Greengauge 21's H network.

<sup>5</sup> High Speed Rail: Consequences for employment and economic growth for GG21



HS2 Ltd<sup>6</sup> assessed three extended networks with HSLs to Scotland. The 'inverted A' most closely replicates an extension from Manchester to Scotland and performed best, with a similar BCR to the London-Birmingham HSL. As with Atkins and Network Rail's schemes, there is scope for fine-tuning the London-Scotland scheme to maximise the return. There is less scope to do so with the London-Birmingham scheme, which is more developed and therefore already been 'maximised' to a greater extent.

This network assumes 250mph operation and delivers:

- nearly four times as many London-Scotland passengers/day as a London-Birmingham HSL
- £103.1 billion net transport benefits (2009 present value)
- BCR of 2.3:1

HS2 Ltd, Greengauge 21 and Network Rail all estimate the cost of an extension from north-west England to Scotland at around £15-17bn.

HS2's opponents challenge these assessments; for example the RAC Foundation argues there are better potential transport investments (roads). It commissioned John Preston of Southampton University to analyse HS2 documents and Atkins' independent study of alternative transport projects. The table below appears in a RAC document ostensibly arguing against HSR.

HS2 studies; appraisal results (£m, PV 2009 prices)

	HS2	Manchester extension	Leeds extension	Full network
Net Benefits	28,700	8,100	30,300	67,100
Net Costs	11,900	3,700	1,200	16,800
BCR	2.4	2.2	25 (sic)	4.0
NPV*	16,800	4,400	29,100	50,300

<sup>6</sup> HS2 Ltd was set up by the Government to examine a London-Birmingham High Speed Line, with further extensions to the north subsequently added to the brief



The fact that four studies by respected transport planners all concluded that there is a case for HSR, whilst based on different objectives and concluding that there are different benefits and designs, is a sign of strength. Given the uncertainties of project planning, one study might be dismissed on the basis of its objectives or assessment. Four studies provide 'belt and braces' confidence; an individual scheme might be challenged, but the principle is secure.

### **What are the challenges for Scotland?**

The studies show that serving Scotland enhances the business case for HSR. Nevertheless, whilst such *services* appear to be a firm government commitment, there is none to building new High Speed Line north of the Manchester/Leeds axis. Scotland faces at best a journey time to London of three and a half hours, compared to two and three quarter hours or less with HSL throughout. Consequently the benefits for Scotland would not be maximised, and may be less than for northern English cities.

Perhaps the financial, organisational and legislative challenges of building throughout from day one are too great. Perhaps Westminster and Holyrood are engaged in some shadow boxing over financing a line that might be less relevant for England's major cities. There is no technical reason why a line cannot be built from both ends.

To fully understand the risks for Scotland we have to return to the rationale for HSR in the first place. As noted above, it is capacity, not speed per se, which is the bedrock of HSR. Between London and Birmingham, the government plans a two-track railway with a capacity of 14 trains per hour each way. Onto this will likely be funnelled services from Leeds, Sheffield, the East Midlands, Manchester, Liverpool, Birmingham, and perhaps north Wales, as well as those from Scotland. If the direct Heathrow connection is built, extra paths have to be found for its services.

Frequencies to individual destinations will therefore be squeezed, and/or optimal paths compromised. Furthermore, it is not clear that the existing lines north of Manchester/Leeds can cope with HS trains running on/off the new routes. This is not simply a matter of whether or not to run the Continental Gauge HS trains onto existing lines; that issue is relatively easily solved by deploying 'classic compatible trains' or clearing the gauge.

Rather, it is not clear how the existing lines can provide suitable paths for HS trains, even though running at conventional speeds. Both the Anglo-Scottish lines are busy, mixed traffic railways. The need for adequate performance buffers, to ensure that trains are delivered onto the High Speed Lines at the right time to meet their designated paths, might suggest 'padded' journey times.

Another risk is that even the notionally committed sections of HSL might not be completed. This project, whilst not completely unprecedented (cf Channel Tunnel, London Crossrail) is of much greater scale than the UK usually tackles. Passing the required Bill is likely to take nearly the duration of this

Parliament. It is clear, however, that the Coalition Government is strongly committed to doing so. Despite a number of opportunities to trim or delay, the government has placed it as a centrepiece of its transport programme.

The Labour Party, which could be in government when it comes to construction, has, however, indicated that the HSR project will be included in a review of its policies; which has made some project supporters uneasy. It is interesting to reflect on whether this would be the case if Andrew Adonis still held Labour's transport brief.

The financial commitment is, surprisingly, not that great. As noted above, the peak annual spend is not much greater than for London Crossrail, which conveniently will be largely complete as HS2 construction gets going. The task for a promoter is to neutralise cost as a political issue.

HSR has a problem in that the railway industry is not entirely united behind it. Some argue that it would be better to spend equivalent funding across the existing network, or that the HSR project will Hoover up all investment funding. Interestingly, that argument was never applied to London Crossrail. Fundamentally, this misunderstands the nature of priorities and finance in government. If the HSR project did not proceed, there is no guarantee that the funding would be reallocated to railway projects. There is no guarantee it would even be reallocated to transport projects.

Furthermore, this argument assumes that it is possible to invest equivalent funding in the existing railway. There is a limit to the amount of work that the existing network can sustain at one time. And releasing unprecedented amounts of cash on the railway runs the risk of encouraging careless spending. Financial constraints may be a permanent bugbear of public and private sector alike; but they do enforce discipline and prioritisation.

Opponents on the line of route have used these arguments. Local opposition has been highly vocal. However, some have deployed (whether accidentally or deliberately) misinformed claims and arguments. This grabs quick headlines, but will not stand up to scrutiny by parliamentary committee or public inquiry. It risks damaging its cause by undermining by association more soundly based critiques of HS2.

The political risk to the government can be overstated. The proposed line runs through constituencies in the Chilterns which are hardly marginal. Before HS1 was built, councils negotiated local concessions from the government in return for their support. In the case of HS2, local councils have apparently already decided that there is no compensatory trade-off that is sufficient to overcome their opposition. Time will tell whether that was a tactical mistake.

Contrary to some claims before HS1 was built, it is now integrated into its environment. In particular, there are few, if any, complaints about operating noise.

Terry Gourvish, in a review for HS2 Ltd<sup>7</sup> states that ‘Most studies do not pin much faith in new railways as an engine of growth; but a growth stimulus is not entirely absent’. Gourvish cites Preston and Wall’s literature review which concluded that the impact of HSR was probably within 1-3% of GDP; and presented this as insignificant. However, in developed economies where long term annual economic growth is often around 2-3%, this is a major impact.

Indeed, different studies of the same location have produced apparently contradictory outcomes. Gourvish quotes studies showing the most disappointing results at intermediate stations Le Creusot and Mâcon-Loché (on the LGV-Sud-Est), perhaps at Haute-Picardie (LGV-Nord), in Limburg and Montabaur (Köln-Frankfurt), at Ashford and Calais, and in Kent generally.

By contrast, after completion of HS1, Greengauge 21<sup>8</sup> found that in December 2010 regeneration agency Ashford Future reported an upsurge in businesses relocating to the area. The South East England Development Agency expects Ashford to be the fastest growing economy in Kent in 2010-11.

Greengauge 21 argued that this illustrates:

- HSR does not ‘suck’ development to London. Ashford shows how co-ordinated economic development and planning can ensure HSR brings the wider benefits suggested by modelling.
- The effect on the local economy happens before full HSR demand builds up. Changes in location and behaviour take longer, as is historically the case with commuter rail enhancements.

Questions about the extent to which transport investment benefits the economy are not, however, limited to HSR.

It is not enough, therefore, to assume HSR alone will deliver wider benefits to local economies. Additional economic development and planning measures are needed to maximise the return from the infrastructure investment. In Scotland, the Glasgow Edinburgh Collaboration Project commissioned Halcrow to identify the additional measures needed. The outcomes of this research are now available to be implemented in time for the commencement of HSR services.

## Summary

The late development of High Speed Rail in the UK can be understood in the context of railway operations and political culture.

By the 1970s, the UK had developed (contrary to popular perception) one of the best, and fastest, intercity networks in the world. Building new High Speed Lines was, depending on one’s viewpoint, either not a priority or a necessity. Furthermore, until the 1990s the railways were widely regarded as a declining industry, with little to offer the national transport system except in special cases.

Secondly, Britain’s political culture does not favour ‘grand projets’. It is not this paper’s purpose to consider why this is the case; but it affects, and in some cases determines, the solutions which are chosen to specific problems.

British exceptionalism was expressed in the contrary arguments that the UK:

---

<sup>7</sup> The High Speed Rail Revolution: History and Prospects

<sup>8</sup> ‘Early Lessons from Kent’

- a) is too densely populated to warrant or allow HSR
- b) has a centralised economy and population; outside these activity is insufficient to warrant HSR

However, circumstances have now combined to reshape the context. HSR is a well-established part of transport networks across the world. It is less likely to offend a British suspicion of anything new, or (even worse), anything French.

Britain's railways, far from being a declining industry, sometimes now suffer from the opposite, with great (and sometimes unrealistic) expectations of their potential contribution to transport systems.

One could say that Britain was dragged reluctantly into building 68 miles of HS1. Having finished the job, it decided that maybe it wasn't so bad after all, and might be useful elsewhere.

The prospect of a significant domestic High Speed Rail system is, therefore, closer to being realised than ever before. It is not, however, a certainty; much has yet to be done. As the project gets closer to implementation, another facet of British culture may take hold, and the doubts will grow louder. However, for the first time it is possible to say that, by the next General Election, HSR will be beyond the point of no return. If the project survives till then, it will happen.