

Part 6: correcting inaccuracies about maglev in the interests of informed policy-making

Summer 2004

UK Ultraspeed initial feasibility case presented at No 10. Requested to develop for presentation to Prime Minister.

September 2004

UK Ultraspeed present strategic maglev case to the (then) PM, who undertakes to request DfT to expedite matters.

October 2005

Initial meeting with the (then) Secretary of State for Transport granted. No follow-up by DfT.

June 2006

Some 20 months after the No 10 presentation, UK Ultraspeed is finally invited to present evidence to a technical review organised by DfT.

October 2006

Factual and financial case published in [UK Ultraspeed Factbook](#), the underlying detail of which was also submitted to the Eddington Review. UKU presentations to DfT at this time state an overall estimated capital cost for the full London – Scotland system of ±£29 bn *including all land costs*. This estimate is based on the detailed breakdowns stated on p26 of the Factbook. Key amongst these were cost estimates *excluding land*, of between £16.0 and £19.8 bn.

July 2007

Rail White Paper published. It contained the following, provably incorrect, passage which overstated maglev capital cost by a materially prejudicial £31 bn (!).

6.27 “maglev would be sufficiently fast to provide a London–Glasgow service that could compete with air on journey time, whilst providing intermediate stops at Birmingham, Manchester, Leeds, Newcastle and Edinburgh. Its promoters, UK Ultraspeed, have estimated a cost of £29 billion (excluding land-take) for such a network...”

Compounding the error, the White Paper then doubles the already incorrectly-cited £29bn to

“suggest...that the figure could be very significantly greater in the UK (of the order of £60 billion)”

The above is *provably* incorrect because it simply mis-claims that Ultraspeed’s *own* 2006 cost estimate of £29bn, which *included* land, to be *exclusive* of land take.

27 July 2007

UK Ultraspeed writes formally to the (then) Secretary of State for Transport, pointing out this error and offering constructive engagement to rectify the situation. The letter is included verbatim below.

Rt Hon Ruth Kelly MP
Dear Secretary of State,

I am writing to you to follow up our brief discussion at Wednesday’s Transport Times conference. I welcome and appreciate your acceptance of a meeting to re-engage regarding maglev in response to my question at the conference. I also applaud your willingness to take questions, particularly so early into the job.

I regret that I had to use my question to correct the £31bn overstatement of the estimated total costs of maglev that has unfortunately been included in Section 6.27 of the White Paper. I’m sure you will understand I simply had to correct the public record regarding the misquotation of our own figures. Drawing your attention to the text, let us examine the error.

The White Paper states: "maglev would be sufficiently fast to provide a London–Glasgow service that could compete with air on journey time, whilst providing intermediate stops at Birmingham, Manchester, Leeds, Newcastle and Edinburgh. Its promoters, UK Ultraspeed, have estimated a cost of £29 billion (excluding land-take) for such a network..."

The cost estimate attributed to us is wrong. We know it to be wrong, because the White Paper is citing our figures.

In fact, the £29bn figure is itself an estimate of the order of magnitude of total capital costs for an 800km national system. It already includes land and the other risks the White Paper has loaded into its £60bn(!) figure.

The true figure (excluding land) is £20m – £24.75m per route km, giving a total cost for an 800km system (excluding land) in the order of £16bn – £19.8bn. This is set out on pp 25-26 in the UK Ultraspeed Factbook [enclosed]. The underlying detail is in the pre-feasibility work produced for No 10, which is in the Department's possession.

Compounding the error, the White Paper then doubles the already incorrect £29bn to "suggest...that the figure could be very significantly greater in the UK (of the order of £60 billion)".

This headline number of £60bn both misrepresents the maglev case and could, if left uncorrected, be seen to be materially prejudicial against it. This difficulty can be resolved by the production of accurate facts. I propose later in this letter a process of collaboration with the Department to achieve such a resolution.

For now, though, let us remain with the White Paper text, which concludes: "Given the balance of these considerations, the Government does not favour further development of maglev options".

The most significant consideration in that balance is cost. With the massive overstatement now corrected, the entire balance shifts. Removing £31bn of erroneous cost has a fundamental effect on the inclination of any playing field. Maglev is now due serious consideration: balanced and informed policy-making requires it.

The fundamentals remain. UK Ultraspeed maglev has a powerful case as an exceptionally cost-effective and comprehensive answer to many of the questions of capacity, connectivity and carbon which the White Paper itself raises and which you most eloquently presented yesterday.

In addition, the sheer speed of maglev transforms the competitiveness of the regional economies of the UK. This would, in itself, help relieve the multiple stresses increasingly bearing on London and the South East.

As indicated above, I propose that we move on, by moving into a process of rigorous study which will produce a robust understanding of maglev in the UK, including accurate costs.

Things have progressed significantly since we last engaged with the Department. Studies of potential Stage One maglev routes are now being scoped or started in a number of locations in Northern England and Scotland. Various public sector partners are involved.

These studies are intended to provide hard facts and costs about specific city-to-city Transrapid maglev routes in UK-specific conditions. They will also deliver comprehensive project finance proposals, which take into account both capital expenditure and long-term operating, maintenance and lifecycle costs.

The studies will enable the whole-life costs of maglev to be compared to those of comparably scoped classic rail schemes. Preliminary work shows these to be between 35% - 50% of heavy rail; a step-change in value for money for both Government and/or private sector participants in the funding, delivery, operation and maintenance of major transport systems.

The studies will also provide robust, UK-specific data on energy consumption and will define the path which UK Ultraspeed intends to follow, from a current position of significantly lower carbon emissions than TGV-style trains, toward the ultimate target of 500km/h (311mph) transport with zero carbon emissions.

UK Ultraspeed

With all the above in mind at our forthcoming meeting, I would look to discuss with you how the Department could invest in these studies – collaboratively with ourselves and our other public sector partners – to produce balanced, accurate and comprehensive data on UK maglev. This data will both enable the Department to correct the numbers currently in the White Paper on the basis of new evidence and provide you with accurate facts to inform future policy decisions.

I am communicating the essence of this letter to a number of our regional and corporate stakeholders, in confidence, to appraise them of the accurate position.

I look forward to hearing from your office to set up the meeting.

Yours sincerely,

Dr ALAN JAMES

PS. I note some rather inaccurate discussion of the costs of maglev in China used at various points in the White Paper and its supporting documentation. For clarity, the total costs for the Shanghai maglev system, including all guideway, vehicles, substations, auxiliary equipment, and interest during the construction phase (again excluding land, which was provided by the State) were 9.943 billion RMB or 1.198 billion USD.

This produces an average (excl land) cost per route km of 330 million RMB (39.759 million USD), or around £20m per route km at today's exchange rates. This is in line with our own projections and is as little as 50% of the cost of rail-based transport projects in Shanghai. I would be happy to send documentation on this subject to your officials.

28 September 2007

Secretary of State responds by letter, stating “we have no plans to participate in or fund studies into maglev” and retracting her commitment to meet with Ultraspeed, which was made in public at the Transport Times conference of 25/07/2007.

29 October 2008 Secretary of State appears before Transport Select Committee

In the following exchange, Mr Hoon confirms that Government's mind remains open to maglev, but repeats the materially prejudicial mis-statement of costs derived from the 2007 White Paper, despite this already having been corrected on the record by letter to his predecessor.

Q27 Mr Clelland: On the high speed rail question, I was interested to see you were talking about the possibility of providing new lines. Does that mean that the Department's mind is no longer closed to the idea, for instance, of a maglev line, or is it still closed to that idea?

Mr Hoon: It is certainly not closed to it, although I think the Committee will be aware that the track costs are something like three times as much for a maglev line as for a conventional line. We are certainly not closed to it but we have got to be realistic about what we can afford.

To recap for clarity.

Maglev: £30m/km. High Speed Rail (CTRL): £56.42m/km [± £60m/km in comparable 4Q 2008 numbers].

500 km/h maglev costs less than TGV-style rail, not 300% more as the Secretary of State had been briefed.

30 October 2008

UK Ultraspeed *again* writes formally to the Secretary of State for Transport, formally pointing out this error and offering constructive engagement to rectify the situation.

Rt Hon Geoff Hoon MP
Dear Secretary of State,

I am writing to you in response to your mention of maglev at Wednesday's Transport Select Committee hearing. I was delighted with your statement in reply to David Clelland's question that you have not ruled out maglev in Britain. In the light of your statement and of the growing political consensus that

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investment in high speed ground transport is an urgent necessity, I write primarily, to affirm UK Ultraspeed's readiness to re-engage immediately with DfT to move things forward.

I am, however, concerned that the view persists that maglev costs more than 300km/h [186 mph] TGV-style wheel-on-rail in UK application. This is inaccurate.

Regrettably, the 2007 White Paper statement on maglev costs was wrong. And we know it to be wrong, because it used our own figures and then erroneously simply double-counted major items. Please see my 27/07/07 letter to your predecessor for the detail.

But let us not revisit old ground, but rather progress matters on a robust foundation of fact. In this spirit, and to assist informed policymaking, much detailed work has since been carried out on maglev over the last year. This new evidence, which we will be happy to present to you and your senior team, now includes data on journey-time, speed, energy and CO2 performance to a very high level of accuracy: ± 1 metre, 1 second and 1 kilowatt. Detailed results versus train, plane and car are now also to hand. Project Finance modelling to the standard required to support substantive initial engagement with HM Treasury has also been completed.

Critically, detailed capital costings for a variety of UK maglev applications have been examined.

These consistently produce capital costs for maglev, including land, in the region of £30m per route km, including such complex route sections as the traverse of the Pennines and alignments into the hearts of London and other major cities including Birmingham and Manchester.

Compared to maglev's £30m/km, your Department has published an out-turn cost for CTRL (the UK's only TGV-style wheel-on-rail system, including the cost of Temple Mills Depot) of £56.42m/km. This would be over £60m/km in comparable 2008 terms.

On the basis of studies to date, 500 km/h maglev capital costs are less than 300 km/h TGV.

On a more fundamental level, maglev requires only one line to link all the major city-regions of the 'West Coast' and 'East Coast' corridors, whereas TGV-style rail needs two routes, yet is slower to all destinations. This means between 100 km to 200 km less infrastructure than TGV. That's billions saved before a service has ever operated. Maglev's single-route approach also means that only maglev can cost-effectively link the important catchments of Yorkshire, the North East and Scotland's Central Belt to a national network.

On a whole-life basis, the maglev case is stronger still. Maglev is highly automated, and highly efficient in O&M and staff costs. It requires only half the fleet, and completely avoids TGV-style physical grinding down of its infrastructure every time a unit moves – maglev never actually touches its guideway. Taking all the above advantages into account, studies indicate that maglev will comfortably outscore any comparably-scoped TGV-style rail project on a whole life basis, whether this is expressed in terms of 'net cost to HMG over a PPP term' or 'NPV of benefit outweighing NPV of cost', or any other similar test of value.

To move matters along, I would be happy to arrange for an early presentation to you and your team. We would propose to focus on both the full-scale London – Northern England – Scotland system and, in parallel, on opportunities to rapidly progress city-to-city pilot projects. We would present comprehensive business cases for each.

I look forward with interest to your response.

Yours sincerely,

Dr ALAN JAMES

The Secretary of State did not reply to the above letter.

15 January 2009

(Then) Minister of State (Lord Adonis) contradicts Secretary of State's statement to the Committee of 29/10/2009 (that Government's mind remains open on maglev) by stating that Government does not wish to see maglev proposals taken forward.

“...the operating and building costs of the maglev are very high. By definition, it is not possible to integrate it with the existing high-speed line, and its carbon emissions are also extremely high—significantly higher than those of conventional high-speed rail lines. All those factors have meant that the Government do not wish to see a maglev proposal considered further.” [Lords. 15/01/2009. Col 1389.]

19 January 2009

UK Ultraspeed CEO writes formally to the (then) Minister (now Secretary) of State, formally correcting the mis-statements of fact, and pointing out that the cost misinformation is *still* being cited, despite formal correction by letters to *two* Secretaries of State. Once again constructive engagement is offered to rectify the situation. The letter is quoted verbatim below.

Andrew Adonis
Minister of State

Maglev

I note your comments in the House of Lords on last Thursday that “the Government do not wish to see a maglev proposal considered further.” I further note that, amongst the reasons you gave for this, are the contentions that “the operating and building cost of the maglev are very high” and that “its carbon emissions are also extremely high – significantly higher than those of conventional high-speed rail lines.”

Regrettably, I fear you have been misinformed. Let us firstly deal with cost. **Maglev costs less than high-speed rail, not more.**

- The average **capital cost** per km of twin-track Transrapid guideway in UK conditions ranges from £27m to £32m, including land and all associated infrastructure, equipment, stations and depots. Recent, independently verified, studies have produced these figures.
- Your own Department’s figure for the out-turn cost of the UK’s only TGV-style railway (CTRL, including its land, stations and Temple Mills depot) equates to £56.42m per km. This is around £60m/km on a 4Q 2008 basis directly comparable with the ± £30m/km maglev cost projection.
- Transrapid maglev’s greater flexibility in curvature and gradients, the avoidance of tunnelling this enables, and much lower land-take are the key reasons for maglev’s lower costs on a km-for-km basis. It should also be noted that a strategic UK north:south maglev network will be 100 – 200 km shorter than any TGV-style system, thus saving kms and further billions of capital costs. Finally, elevated maglev guideway allows land to remain usable for its original purpose, thus making long-term Right of Way rental deals possible, further saving up-front capital costs.
- Regarding **operating costs**, friction-free operation means zero abrasion of the track, more intensive use of much smaller fleets is enabled by higher speed, and full automation dispenses with many staff costs. This all results in O&M costs typically 50% to 65% of a similarly-scoped wheel-on-rail system.
- The misapprehension on maglev capital costs goes back to a curious ‘double-counting’ of maglev costs in Section 6.27 of the 2007 Rail White Paper. In essence, the White Paper explicitly quoted a UK Ultraspeed estimate for the entire 800 km London – Scotland system of £29 bn, which overtly *included* land and all associated infrastructure costs. However the figure was misquoted as “excluding land” and then very simply ‘doubled up’ to £60 bn. This resulted in a highly misleading £31 bn (!) overstatement of UK maglev costs.

Let us now turn to emissions. **Maglev produces less carbon emissions than high speed rail, not more.**

- A typical wheel-on-rail unit covering a kilometre at its cruising speed of 300 km/h will consume 18.0 kWh; a Transrapid maglev unit will cover the same kilometre, for the same energy consumption, at 400 km/h.
- If the train attempts 350 km/h, its consumption will rise to 23.7 kWh per km. For *less* energy consumption – 23.2 kWh per km – the maglev unit will travel at 450 km/h.

Incidentally, fyi, maglev has the upper hand over wheel/rail in noise emissions too. A TGV at 300 km/h produces 95dB(A), maglev produces only 79 at 300 km/h and 90 at 500 km/h. In city-centre operations at 200 km/h maglev is essentially silent, producing less noise than the city background.

I imagine that you will be disappointed that your Civil Servants briefed you with factually incorrect wording on such important matters, especially when many of the errors had already been drawn to their

attention by on-the-record letters to the current Secretary of State [30/10/2008] and his predecessor [27/07/2007].

This is doubly frustrating, because the factually correct and extremely detailed case for UK application of maglev is readily and publicly available at www.500kmh.com/UKU_London-North_BizCase2008.pdf. This includes, for instance, energy and carbon results, produced with empirical maglev consumption data, accurate to the second, to the metre and to the single kilowatt. It also has detailed Capex, O&M and energy cost data, along with trip-time and capacity findings.

I should also point out that the German Transrapid maglev system, which UK Ultraspeed uses and which is the only ultra-high-speed maglev in public service, should not be confused with the still-experimental Japanese MLX system. Japanese maglev costs per km are roughly three times greater than our system. Perhaps some confusion has also arisen there?

I agree strongly with your support for high speed ground transport and applaud your openly raising the question of whether Britain should "opt for next generation technology". UK Ultraspeed is, of course, prepared to engage in any factual process to answer that question.

Maglev works uniquely well in Britain, where there is no sunk investment in domestic TGV lines. And, to address the other point you made in the Lords, maglev also offers interchange to CTRL, providing *faster* journeys to the continent from the Midlands and the North than extending the less efficient and more costly 300 km/h rail line.

So what now? Clearly, the Department has set the wheels in motion with the establishment of the HS2 Company. Sir David Rowlands and his team, starting from a well-rehearsed and explicitly wheel-on-rail position, will produce a wheel-on-rail answer to the question. Fine, as far as it goes. But, in the unique geo-economic conditions of the UK, maglev has a very strong case as a faster, cheaper and greener answer.

The present difficulty is that the potentially strongest solution has been prematurely excluded on the basis of statements that are provably factually inaccurate. I therefore suggest that, in the interests of balanced and informed policy-making, we resolve the situation the following manner.

1. Hold a meeting by the end of Jan 2009 in which we will update you on latest planning work, including the most recent independent validations of our cost and carbon data.
2. Clearly, the material presented at the meeting would be "new evidence", the emergence of which would provide a sound basis for DfT to re-engage with maglev.
3. Establish a body, within an agreed and rapid time-scale, to work in parallel with HS2, to develop and deliver 'the maglev answer'. Given the specialist knowledge required, the composition, remit and brief of this body would best be defined in dialogue between our own experts and counterparts from the Department. Its resourcing and funding should be such as to enable it to produce results of equal weight and stature to those Sir David will deliver in the wheel-on-rail interest.

In due course, this process would produce technical, commercial, macro-economic and funding cases for *both* maglev and wheel-on-rail which could then be duly weighed on their merits, on the facts, and on their respective abilities to create strategic value in the British economy.

A great deal of maglev work has already been done. We are significantly ahead of the point Arup and Greengauge 21 have now reached with their wheel-on-rail studies, so things could move rapidly.

I trust Points 1 – 3 above provides a satisfactory basis for moving ahead in the constructive and progressive spirit to which you will find Ultraspeed committed.

Please contact me to set things up.

Yours sincerely,
Dr ALAN JAMES

21 January 2009

Minister of State replies, stating "I have passed your comments on to Sir David Rowlands, the chairman of High Speed Two."

23 January 2009

UK Ultraspeed writes to Sir David Rowlands, confirming happy to meet and offering constructive engagement.

UK Ultraspeed

30 January 2009

Sir David Rowlands replies, offering meeting.

27 February 2009

The gross overstatement of maglev costs originated by DfT in the 2007 Rail White Paper, and *still* uncorrected despite on-the-record letters to two Secretaries of State and a Minister of State, now misleads the *Scottish* Parliamentary Inquiry into High Speed Rail, whose report is published on this date.

103. The UK Government white paper Delivering a Sustainable Railway stated in July 2007 that “the Government does not favour further development of maglev options”.

104. In its January 2009 High Speed Two paper, the UK Government noted that the 2007 White Paper had found that when compared to a conventional high-speed rail line “a maglev would be some three times more expensive than the ‘rail’ options.” [www.scottish.parliament.uk/s3/committees/ticc/reports-09/trr09-01.htm#report]

02 March 2009

UK Ultraspeed CEO meets with Sir David Rowlands at High Speed Two and outlines cornerstones of maglev business case and its potential to deliver better value for the taxpayer than rail. Offers constructive engagement.

03 March 2009

UK Ultraspeed CEO writes to Sir David. The letter is quoted verbatim below.

Dear Sir David,

Many thanks for taking the time on 02 March 2009 to meet with me regarding maglev. This letter firstly summarises our discussion and then, as you requested, puts forward a proposal. This is for a maglev study, to run in parallel with, and to provide a competitive counterbalance to, the wheel-on-rail proposition already being developed by your organisation.

I welcomed the opportunity to present to you selected key points of the very robust policy and business case for maglev as a most cost-effective, comprehensive, and internationally competitive UK High Speed Ground Transport [HSGT] solution.

As we discussed, considerable work since 2003 has shown a UK maglev network using the German Transrapid system to have at least as good a case as conventional High Speed Rail [HSR] and, in specifically UK conditions, to be suited to a broader range of applications than HSR. These range from city-to-city links utilising maglev’s unbeatable acceleration, to the strategic intercity links where maglev’s unbeatable cruising speed is the key advantage. Overall, maglev’s ability to integrate *both* these functions into *one* system contributes greatly to its ability to deliver superior results in both performance and value.

Regarding the maglev technology itself, I welcomed the opportunity to discuss the distinctions between the £30m-per-km Transrapid system and the £100m-per-km Japanese MLX system. The latter, as Andrew Adonis rightly stated in the Lords, is inappropriate for Britain. Ultraspeed exclusively uses Transrapid.

Both wheel/rail *and* Ultraspeed maglev may be potentially applicable in the UK. As I explained, maglev has strong potential to deliver better value for the taxpayer. This arises in part because, in Britain, French-style incremental development of TGV-type rail would not work. Under the French model, high speed trains run off dedicated high speed lines and use the classic network for (a) long-term city centre access and (b) interim journey continuation to regions not yet directly served by a high speed line.

Whilst this is indeed the practice in France and elsewhere, UK loading gauge restrictions, the capacity constraints of the classic network, plus Britain’s notorious signalling incompatibilities, mean that this approach will not work physically and financially in the UK. As others have put it, the ‘incremental build’ TGV rationale just does not work here: “in the case of the UK many of the railway networks around our major conurbations are so congested already that they would not be able to handle the significant extra traffic that a high speed rail service would generate anyway”. [Prof R Smith *et al* for DfT, 2006]

So, as I presented, TGV-style rail costs are likely to be high. Indeed the only UK precedent for such a scheme is **CTRL, where out-turn cost was £56.42m per km** (\pm £60m/km in today's money), largely as result of the expensive tunnelling required to provide TGV access to the city centre in UK conditions. By contrast, **maglev reduces up-front capital cost to \pm £30m/km**, both by means of largely elevated construction, and by engineering parameters which permit tighter bundling with existing transport corridors than HSR. These maglev advantages radically reduce both land-take and environmental intrusion, whilst simultaneously enabling significant reductions in up-front capex by rentalising many land costs over time.

Further reinforcing the case, maglev O&M efficiencies produce exceptional *whole-life* economics. The self-evident advantages of a fully automated system, which never degrades its track (because it never physically touches it whilst in motion), and whose speed advantage enables more intensive use of a smaller fleet, all combine to deliver taxpayer whole-life value which HSR is extremely unlikely to be able to match.

Proposal

With all the above in mind, as discussed, the public interest clearly requires *both* rail and maglev cases to be developed. This not only serves the general interests of the taxpayer, but also keeps open a truly competitive strategic procurement process, with the Government investing in advancing the business cases for *both* potential solutions to the same level of detail.

On the rail side, you explained HS2's plans for High Speed Two to fund an expert team from the rail world to develop a wheel-on-rail proposal, with the intention that this team will report to you for presentation to Government by the end of this Calendar Year 2009.

As discussed, we now propose that High Speed Two invests in a parallel study to be conducted by experts from the maglev world; a team which would ourselves assemble and lead. This equitable and balanced approach would empower both rail and maglev to compete on their respective merits when, in due course, Britain's high speed ground transport is procured.

As I pointed out, given the work the Ultraspeed team has already undertaken for No 10 and others, the UK maglev case is already more advanced in some respects than the Greengauge 21/Arup/Network Rail data on which the HSR case will be founded. Leveraging the strength of this previously completed maglev work, I am delighted to put forward the proposal set out below.

UK Ultraspeed commits to produce a comprehensive maglev study to a scope and remit to be mutually agreed, and to do so to the same end-2009 timescale as your initial HSR outputs. Funding for this study would be provided by High Speed Two. This funding would be agreed in the light of the agreed scope and remit, but would not exceed 80% of the funding and resources invested by HS2/DfT in the 2009 HSR work.

From consistent experience of work to date, we would expect the maglev system defined by such a study to:

- be faster than HSR;
- provide capacity similar to, or higher than, HSR;
- produce lower emissions than HSR on like-for-like trip-time basis;
- require lower land-take than HSR;
- produce lower noise emissions than HSR
- have lower up-front capital costs than rail (largely as a result of lower land-take);
- be capable of extension to other Northern England and Scottish cities at substantially lower capital cost than rail (the optimum North:South maglev would be 100 – 200 km shorter than HSR and would require no expensive under-Pennine tunnel);
- be capable of more intensive and more automated operation than HSR; and
- require less intensive maintenance than HSR, and thus
- have lower whole-life costs than HSR;
- offer more direct connection to LHR than the Heathrow Rail Hub proposed for the GW main line;
- offer air-beating journey times all the way from London to Scotland;
- offer faster journey times to/from the Continent to/from any point beyond the Midlands than any 'simple' extension of CTRL;
- release capacity on the existing rail network and avoid the risk of creating capacity bottlenecks at existing rail stations as any proposal to 'run-off' TGVs on to classic rail lines could do.

UK Ultraspeed

I very much appreciated your commitment to an initial response by second-half March. Looking ahead, I look forward to agreeing terms for the maglev study proposed above as soon as possible.

Yours sincerely,
DR ALAN JAMES

19 March 2009

Sir David Rowlands replies to UK Ultraspeed rejecting the proposal for a maglev study to provide competitive counterbalance to Network Rail's wheel on rail scheme. This response confirms that Government intends to progress *only* 300 km/h wheel-on-rail, to the exclusion of the 500 km/h maglev alternative and the potentially *greater* benefits it could deliver.

ALAN JAMES
UK ULTRASPEED

Thank you for your letter of 3rd March following up the discussion we had when we met.

I have now had an opportunity to talk to Lord Adonis about whether we should incorporate consideration of maglev in some way into HS2's work programme. I am afraid that the answer is that we should not do so. You will appreciate that the HS2 can only work within the remit set by Government and only on the basis of what it is prepared to fund.

I realise that this will be a disappointment to you but I am grateful for you taking the time to take me through your proposition.

Yours sincerely
SIR DAVID ROWLANDS
CHAIRMAN

The exclusion of maglev by Government's High Speed 2 Company is clearly and materially prejudicial to the interests of the taxpayer.

Taxpayer interests would be best served by balanced consideration of the whole-life costs of *both* systems, weighed against their potential economic, environmental, competitiveness and transport benefits.

Such consideration would ensure that eventual procurement of Britain's high speed infrastructure could be conducted – on merit and on the facts – in a fully informed, balanced, and genuinely competitive manner.

Premature exclusion of maglev is prejudicial to competition, to Britain's strategic transport future, and to the interests of the taxpayer.

Recommendation: that the Transport Select Committee bring its influence to bear, to ensure that, in all work undertaken by Government to study, develop or prepare high speed ground transport, maglev receives equal consideration, resources and funding to those dedicated to wheel-on-rail solutions.

June 2009