Dear Lord Hillick,

I write to update the committee on three issues where, during the evidence session of 9 December, the Secretary of State and I undertook to provide further information:

- The impact of HS1, the economic benefit of HS1 outside London and the number of journeys on HS1 compared to the journeys on the slower trains doing the same journey;
- The speed of HS1; and
- Whether £31.5bn is the capital cost of HS2 and if so, whether a £300m per year operating premium is equivalent to a 1% return.

I would also like to take this opportunity to clarify the work we have done to assure our values of time, and to draw your attention to the recently published ‘Transport investment and economic performance’ report by Professors Venables, Overman and Laird.

**Impact of HS1**

The Department has undertaken an interim evaluation of High Speed 1. This is a cost-benefit analysis which covers transport user benefits, wider economic impacts, regeneration, and Government shareholdings and assets. This evaluation is currently going through the assurance processes within the Department, so unfortunately we are unable to share it with the Committee at present.

**The speed of HS1**

I can confirm, as stated at the committee, that HS1 runs at speeds of up to 300 kilometres per hour in Section 1 (Channel Tunnel to Fawkham Junction). It runs at up to 225 kilometres per hour on Section 2 (Ebbsfleet to London St Pancras).
Return on Costs

The £31.5bn figure that Lord Deighton set out in his letter to the committee represents the net present cost to Government of building and operating HS2 over a 60 year appraisal period. This comprises capital costs of £40.5bn and operating costs of £22.1bn, offset against revenue of £31.1bn. In line with standard practice, these costs and revenues are present value figures and have been discounted to reflect that, generally, people prefer to receive goods and services now, rather than later. This means that revenues received during the latter part of the HS2 appraisal period are significantly discounted compared to the construction costs incurred earlier in the appraisal period. The £31.5bn figure is not directly comparable with the commercial analysis set out in the financial case for HS2, which can be found here:


The commercial analysis provides a better understanding of the affordability of HS2 in the context of wider GB rail. The key finding is that the ‘reference case’ shows that HS2 would be of benefit to the taxpayer once it reaches steady state when operational. The reference case is consistent with the assumptions of the ‘Standard Case’ in the Economic Case, including that demand stops growing in 2036-37 - only three years after Phase Two opens.

The analysis shows an additional operating surplus across GB rail of around £300m a year on average (in 2010-11 prices) in steady state once HS2 is operational. This comprises an operating surplus for HS2 services of around £2.8bn and an additional subsidy requirement for classic services of around £2.5bn (due to abstraction by HS2). HS2 operations are expected to make a significant operating surplus on a standalone basis.

This modelled annual surplus might best be considered as relevant to the ongoing affordability of HS2 once operational, rather than as a ‘return on investment’ figure. However, the benefits of transport investment are wider-ranging than the narrow financial return to government. That is why we calculate the benefit-cost ratio (“BCR”) in our transport appraisals. As the committee is aware, the BCR for the full network is 2.3, which means that return in economic benefits for HS2 will be more than £2 for every £1 spent. This represents high value for money.

Values of Time

Given the committee’s interest in the area, I also thought it would be helpful to direct your attention to a significant body of work the Department has conducted over the last 18 months to examine the values of time across all journey purposes. This has been published and can be found at:

Most notably, as part of this research the Department commissioned a study led by
the Institute of Transport Studies Leeds to examine the existing evidence base for
different approaches in valuing the travel time savings of business passengers. The
report is titled ‘Valuation of Travel Time Savings for Business Passengers’ and can
be found at:


This was published in April 2013 – before the latest iteration of the HS2 business
case. One of its key recommendations was for the Department to update its values
of time for business passengers using more recent data. The Department acted
upon this recommendation and the values applied in the September 2013 Economic
Case for HS2 reflect data from the 2008-2010 National Travel Survey which was the
most recent data available at the time the work was conducted.

The study demonstrates that these revised values are towards the centre of the
range of estimates and therefore we firmly believe represent a reasonable estimate
of the willingness-to-pay for travel time savings in the course of work. The study also
suggested that the value of time for high speed rail journeys may well be higher than
the WebTAG value used in the economic case.

**Transport investment and economic performance**

The Department for Transport has now published the ‘Transport investment and
economic performance’ report by Professors Venables, Overman and Laird. This
report examines the latest evidence on how transport affects the economy and
provides suggestions and suggests improvements that DfT can make to assess the
value of our conclusions. This report concludes that the WebTag approach, which is
used to appraise HS2, is rigorous, well-grounded and "world-leading". The report is
located here:


I hope you and the Committee find this information helpful.

Yours sincerely,

David Prout