

To:

Paul McMahon  
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Office of Rail Regulation

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Dear Paul

**Review of Response Documents for ORR**

I have reviewed both the ITS documents that Andrew Smith sent to me:

'A response to the LECG and Horton 4 Consulting Reports on the UIC International Benchmarking Study' By Andrew Smith and Phil Wheat

And

'International Benchmarking of Network Rail's Maintenance and Renewal Costs: An Econometric Study Based on the LICB Dataset (1996-2006), Report for the Office of Rail Regulation' by Andrew Smith

The second document supplements the first. I will therefore concentrate my comments on the first document (I will refer to this as Smith and Wheat) which addresses both consulting reports commissioned by Network Rail to comment on the ITS's work on international benchmarking, which I have been peer reviewing to date. I also note that these comments are a final iteration and that some earlier detailed comments by me have already been directly addressed in the current versions of the above documents.

The Response document clearly addresses all of the substantive points raised by the two consulting reports. I agree with the point by point refutation. However it is worth highlighting some of the particular points made in the Response document and raising some further points which were outside the scope of the Response document.

With reference to the LECG report, Smith and Wheat respond to what I regard to be the three central points at issue: first, data quality; second, choice of technique; and third LECG's own model.

On data quality, Smith and Wheat clearly demonstrate that their approach attempts to make use of the best available dataset and apply the latest frontier efficiency techniques to analysing it. On the dataset the work undertaken by the ITS is first rate. Few regulators have attempted careful frontier-based international comparisons in any regulated sector. The main reason for this is lack of available data and lack of institutional commitment to the time required to collect a standardised dataset. It is clear that the ORR/ITS have made a substantial investment in this and that LECG have no concrete suggestions as to how the current dataset might be improved. The work done for the ORR by ITS thus compares favourably with the use made of international data in Airports, Postal Services,

Water, Electricity, Gas and Telecoms in UK. LECG make no suggestion that this has not been the case.

On choice of technique, ITS have made use of sophisticated Stochastic Frontier Analysis (SFA). The work done here compares very favourably with the good use made of SFA in Telecoms and Postal Services in the UK (the latter most recently undertaken by LECG). The degree of transparency in the techniques undertaken and amount of explanation now available for model choice in the original documentation and the Response documents exceeds that available for Telecoms and Postal Services.

On LECG's own suggested model, it is very unfortunate for LECG that this model is not robust for the Network Rail data. As Smith and Wheat point out the LECG model is in fact nested within their preferred model and clearly rejected. Here the econometrics confirms common sense: It is simply not credible to propose a model which suggests Network Rail's efficiency rose through Hatfield. I therefore find Smith and Wheat's refutation of the criticisms of the ITS's work convincing and agree with them that LECG has not raised any reasonable objection to the work done for the ORR by ITS and furthermore (and more importantly) have not suggested any credible alternative.

Turning to the Response to the Horton 4 Consulting Report. Here Smith and Wheat have a much easier task. It is quite clear that the Horton Report does not seriously engage with the sophisticated econometrics that ITS have undertaken. It also does not offer any frontier based alternative benchmarking calculations. Any report which begins by questioning the rationale for the use of frontier efficiency is simply not paying sufficient attention to the widespread and successful use of efficiency analysis by UK regulators. For a UK regulator at the stage of maturity of the ORR to fail to make good use of frontier benchmarking would be a sign of incompetence. To go on to question the use of panel data and offer an OLS estimation which ignores the panel information is poor econometrics and out of line with best practice in efficiency measurement. Smith and Wheat quite properly take the Horton analysis to task on these grounds.

Finally, it is worth highlighting two points about the translation of the efficiency scores into performance targets for Network Rail. Two adjustments are made. First, the use of the upper quartile of efficiency score of the preferred SFA measure. There is, as Smith and Wheat point out, no need to make this adjustment on theoretical grounds (SFA already adjusts for the possibility of measurement error). This adjustment reflects ORR's aim to use a conservative estimate of Network Rail's efficiency gap as its starting point. Second, in arriving at its draft determination, ORR proposed that, following the first adjustment, only 2/3 of the measured inefficiency should be eliminated over the period of the price control. This is generous. In the latest electricity distribution price review the figure was 100% (previously 75%) using the already less generous (to the companies) COLS technique. The choice of how quickly to close the gap is clearly a matter of judgement for the regulator, however in my view this is a generous (to Network Rail) starting point for negotiation.

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