

THE QUIET RAILWAY DEVELOPMENT PROJECT 1991-1993 - ASSESSMENT OF ROLLING NOISE REDUCTION DUE TO BOGIE SHROUDS COMBINED WITH TRACKSIDE BARRIERS

The Quiet Railway Development Project is a strategic study commissioned and funded by the British Railways Board. Its objective is to develop means of reducing rolling noise from railway vehicles by a significant amount, by the application of conventional acoustic techniques other than high trackside barriers.

A range of track and vehicle treatments have been evaluated experimentally. Reductions of more than 10dB(A) have been measured at 90mile/h, although it may not be possible to achieve more than a 7dB(A) attenuation from systems which would be acceptable when installed on operating railways. The performance of the track and vehicle treatments would be expected to improve at greater speeds.

The experimental programme has led to the development of prediction techniques for the reduction in trackside noise which would result from various configurations of treatment.