

INTERNAL NOISE PREDICTION FOR RAILWAY VEHICLES - PART 3: ASSESSMENT OF THE STATISTICAL ENERGY MODEL

This report is the last of three in a series which examine the use of a Statistical Energy Analysis model to predict the noise levels inside a railway vehicle. The report compares the predicted and measured airborne noise performance of a MkIII coach and discusses how the model may be improved.

The statistical model gives a good prediction of the internal noise level of a MkIII coach at 160km/h subject to the limitations imposed by the input data. The model could be made more useful by the inclusion of structure-borne inputs and understanding - this is probably the main area where further work is needed.