

## THE EFFECT ON TRACTION ENERGY CONSUMPTION OF REDUCED STATION WAIT TIMES

This report investigates potential energy savings arising from the adoption of coasting in automatic train control algorithms. In particular this report investigates the effect on energy consumption (at the wheel/rail interface) of varying the station wait and train running times given in the Working Timetable such that the overall journey time over a selected route is unchanged.

The selected routes discussed here are parts of the Alderley Edge – Altringham Service which was worked by Class 304 electric multiple units and where, it was envisaged, the pilot scheme for the British Rail Automatic Train Operating system (BRATO) would be implemented.

It is apparent from this investigation that considerable savings in the mechanical energy expended at the wheel/rail interface may be made by a reduction in the station wait time whilst leaving overall journey times unchanged.

Examples of the resulting hypothetical timetables are also given.