

ENERGY SAVINGS FROM TRAIN SPEED CONTROL AT JUNCTIONS

A theoretical investigation has been undertaken of the energy savings attainable when a centralised automatic train speed control system is applied to a perturbed train journey through a junction. A simplified representation of the Southern Region route from Balcombe Tunnel, through Keymer Junction, to Brighton is used to illustrate the study. For a perturbed express train journey over this 19 mile route, savings of between 20% and 45% are possible compared to the best that present drivers can attain. The automatic system can also restore scheduled running in cases where the present manual system cannot.