

NEW SIGNALLING SYSTEMS – LOW COST RADIO SIGNALLING FOR LIGHTLY TRAFFICKED LINES

Reports TM-AUTO-20, TM-AUTO-21 and TM-AUTO-22 created a spectrum of ideas which have initiated significant discussions on the means of providing low cost signalling systems for British Railways. From these discussions some signalling principles for lightly used lines have been established. This report outlines the principles of a proposal for such a low cost system. It includes a description of the proposed equipment which, on the recommendation of the Chief Signal and Telecommunications Engineer, is based on the UIC standards for Radio Communication between track and train.

This system requires the use of four UHF frequencies for communication. Other techniques are available that do not have such extravagant requirements, but they are either not compatible or not fully compatible with the UIC standard system. They have the advantage that it is possible that they may be introduced at a lower cost and could use VHF frequencies.

Therefore, the report recommends that before a decision is finally taken, careful consideration be given to these alternative techniques, to see if any significant cost advantage is possible which may outweigh the apparently strong advantages of a compatible and proven system.