SIGNALLING ON REMOTE SINGLE LINES

British Railways has a considerable extent of lightly used remote single lines, operated by some form of electric token system. These lines have generally already been rationalised to an extent where only the minimum facilities are provided. The block sections are in most cases long and the number of passing loops is the very minimum required to operate the service.

The pole route is principally used for telephones and electric token equipment. It is in many cases life expired over most of its length. Replacement could take place like for like, or as a cable in troughing, or as a buried cable. However, all these methods are very expensive and radio seems to be a cheap alternative, which could even provide some benefits.

The cost of providing signalmen and crossing keepers is also expensive and makes automatic or remote operation financially attractive. Signalmen are required to operate the electric token instruments, adjacent road crossings, points, and signals. Crossing keepers operate road crossings remote from block posts. In some cases single line instruments and road crossings can be operated by the train crew, but this can be very detrimental to the train service, due to the considerable delays caused. Electric token systems have two more drawbacks. The first is the need for the trains to slow down or even stop to collect or exchange or dispose of tokens, and the second is that the instruments themselves are generally very old and expensive to maintain. There have been many proposals for operating lightly used lines cheaply using voice links and regulations. These are all detrimental to the service. In many cases, traffic could be profitably increased if the need to delay trains for signalling purposes could be removed.

This document accepts the need to maintain existing rail services without further detrimental restrictions to the facilities provided. It reviews the modern technology available and suggests new developments, with the aim of producing a cheap replacement for the pole route and a reduction in the signalling operating and maintenance costs, by reducing manning levels.

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