

# ROUTE AVAILABILITY REVISION PROJECT INTERIM REPORT

As freight vehicles have evolved, the RA system has become increasingly inadequate. The Trainload Freight Business asked BR Research to investigate the RA system and put forward proposals for its revision. Additionally it is a requirement of the new system that it allows for monitoring of the state of the bridge infrastructure and how it varies with time, thus allowing more automated responses to queries.

This report surveys the existing system and describes its operation. Several alternative systems are discussed and outline details of a proposed computer based replacement RA system are given.

The proposal is based on the following conclusions:

- The existing method for determining the capacity of metal underbridges is perfectly adequate.
- The existing method of determining the capacity of masonry arches is suspect, but this will shortly be superseded by more advanced methods as a result of the masonry structures project being undertaken by BR Research.
- There are differences in the policies of the various Regional Assessment Engineers regarding the RA classification of routes.
- Large numbers of exceptional load forms are issued to cover virtually all freight movements on BR. Some Freight Planning Departments are even investigating the possibility of automating the production and distribution of these forms, such is their volume.
- The exceptional load form (BR29973) is seen by most Assessment Engineers as the only mechanism available to them for restricting the speed of heavy vehicles or the types of vehicle allowed to use particular structures.
- There are significant benefits to be gained by the Freight business from the revision of the RA system and mechanisation of its implementation. These benefits could include the ability to respond to new traffic flow opportunities much more quickly and may also lead to a reduction in the workload of Freight Planning Offices.
- There are benefits to be obtained by Assessment Engineers from an improved system which would reduce the number of routine enquiries about specific vehicles on a route and would allow new load/speed restrictions to be more readily conveyed to the driver than at present.