

GLRT1212 issue two DC Energy Subsystem and Interfaces to Rolling Stock Subsystem

Background

The 750 V dc conductor rail energy subsystem falls within the scope of the GB interoperability regime but is not one of the target systems specified in the ENE NTSN (Energy National Technical Specification Notice). Because of this, National Technical Rules (NTR) are used to provide the requirements.

What is it about?

GLRT1212 issue two sets out requirements mainly addressing technical compatibility with rolling stock and aspects of electrical safety for a new, renewed or upgraded 750 V dc conductor rail energy subsystem requiring an authorisation under the interoperability regime. It is used along with the Energy NTSN.

What has changed?

The content of this standard needed revising to take account of insights that have arisen from research and requests from industry, to align with post EU exit legislation and changes to referenced British Standards. Most requirements from GLRT1212 issue one have been retained and some have been refined based on industry feedback.

GLRT1212 issue one contained some requirements that do not meet the current criteria to be NTRs but are useful; these have been transferred to RIS-1852-ENE, issue one, *Rail Industry Standard on DC Energy Subsystem and Interfaces to Rolling Stock Subsystem*.

Requirements regarding short circuit currents, loss of line voltage and conductor rail layout have been removed and become open points in this issue.

GLRT1212 now also includes associated rationale and guidance. GLRT1212 issue two is published in parallel with RIS-1852-ENE issue one.

Some of the key changes include; train set current now has a choice of three values and the requirements regarding running rail current and under track cable currents have been removed. Requirements for short-circuiting bar, hook switch operating tools, tunnel emergency circuits, compatibility with position of signals and compatibility of contact systems with heat emissions from trains have been moved to RIS-1852-ENE.

What are the benefits?

Key benefits of these changes include the removal of requirements regarding aspects which did not have a reliable value on a national basis. The publication of this document (along with GMRT2113 issue two, *Rolling Stock Subsystem and Interfaces to DC Energy Subsystem*, RIS-1852-ENE issue one, and RIS-2716-RST issue one, *Rail Industry Standard on Rolling Stock Subsystem and Interfaces to DC Energy Subsystem*) will provide an estimated overall benefit to industry in excess of £338,000 over five years. In addition to the benefits, these documents can also help support the efficient and timely delivery of future electrification projects.

Who is it for?

This standard will be of interest to project entities, assessment bodies, infrastructure managers, electrification suppliers and designers.