

RAILTRACK

Safety & Standards

SAFETY JUSTIFICATION

ISSUE: I

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PART 1 – SCOPE OF SAFETY JUSTIFICATION

This safety justification describes the rationale behind Railway Group Standard GK/RT0210 “Asset Management (Signalling)”. The standard mandates requirements that assist in maintaining the integrity and functionality of signalling and operational telecommunications systems and equipment by ensuring that systems and equipment retain conformity with the conditions of approval and design.

The requirements set out in this standard are derived in part by a systematic examination of the detailed requirements in :

GK/RT0010 Management of Signalling and Communications Systems

GK/RT0107 Silver Migration

GK/RT0129 Life Management of Signalling Relays

GK/RT0171 Maintenance of Signalling Circuit Insulation

and then identifying from them the higher level principles. These are then combined with the revised and amended requirements of GK/RT0170 to form GK/RT0210. All detailed prescriptive requirements which are inappropriate for mandating in Railway Group Standards are devolved to Railtrack Line.

PART 2 – RISKS BEING CONTROLLED

Application of the measures contained within GK/RT0210 will contribute towards maintaining the integrity and continuous and safe functioning of signalling and operational telecommunications systems and equipment over their lifecycle, which is key to controlling major railway risks such as:

- train collisions
- train derailments
- trains colliding with obstructions at level crossings

and ensuring that the operational railway runs efficiently and effectively on a day to day basis.

PART 3 SUMMARY OF CONTROLS

The primary control required by this standard to address the risks identified above is the requirement to establish a high level strategy with supporting detailed plans for managing assets based on their life cycle, under the following headings:

- provide network assets : feasibility, maintainability and safety, design, install and commission network assets
- maintain network assets : define maintenance specifications, monitor and control maintenance activities, defect management, continuous improvement reporting and data collection,
- Continuous improvement cycle : opportunity identification and investigation
- Dispose or replace network assets : reservicing and minor renewal, input to major renewal

PART 4 – COSTS AND BENEFITS

The development of this Standard represents the integration of high-level asset management requirements for signalling and operational telecommunication systems and equipment. The requirement for asset management strategies ensures that a systematic and consistent approach is taken to the lifecycle management of systems and equipment. The requirement for asset management plans ensures that activities specific to particular systems and equipment are defined, and the resource requirements ensure that the appropriate level of competence is available for their execution.

The Standard is sufficiently prescriptive to ensure comprehensive risk control, but at the same time the devolvement of equipment specific measures to Railtrack Line Standards permits an appropriate level of flexibility at the level of implementation. This facilitates the development of broader asset management programmes in which the safety requirements are aligned with parallel corporate business objectives and metrics.

The Standard mandates existing high level requirements and distils others from prescription transferred to Railtrack Line. The cost implications are therefore minor and savings are in fact likely to accrue from the alignment of safety requirements with broader corporate objectives.

PART 5- CONCLUSIONS

GK/RT0210 is a totally revised Railway Group Standard, which amends and supersedes GK/RT0170 and extracts the high level requirements from the four specific system & equipment Standards to be transferred to Railtrack Line. Comprehensive risk control is retained and the safety requirements are specified in such a way that they align with the structure of broader asset management strategy and minimise the associated cost of compliance.