

**Railway Group Standard
GK/RT0077**

Issue One

Date September 2013

Ground Frames and Shunters' Releases

Synopsis

This document mandates the interface requirements for ground frames and shunters' releases that may be operated by railway undertaking personnel.

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Date September 2013**Ground Frames and Shunters'
Releases****Issue record**

Issue	Date	Comments
One	07 September 2013	Original document

Superseded documents

Superseded documents	Sections superseded	Date when sections are superseded
GK/RT0039 issue one Semaphore and Mechanical Signalling	9.2, 6.1 sentence 2, 6.3 para 4; Appendix A.5 para 3 BP3 and para 4 BP2; Appendix A.6 para 3; 5.6 paras 3 and 4; 6.5; 7.1 para 1 sentence 1 and 2, 7.2 para 1 BP2&4; 7.2 para 3; 7.3; 7.4; 8.2; 8.3	07 December 2013
GK/RT0041 issue one Track Circuit Block	B9 para 2 sentences 1, 3 & 4; B9 para 3 sentence 1; B9 para 4, 5 & 6 [excl. 9 para 4 BP3]	07 December 2013
GK/RT0042 issue one Absolute Block	B9 (see impact assessment for details)	07 December 2013
GK/RT0051 issue one Single Line Control	C9, D9, E9, F9, G9, H9 (see impact assessment for details)	07 December 2013
GK/RT0054 issue one Radio Electronic Token Block	B9	07 December 2013
GK/RT0060 issue four Interlocking Principles	C2.2c, C2.4b; C2.4d; C1.2a, b & c; C4.3 para 1 & 2; C5.1.4 para 2 sentence 1	07 December 2013
GK/RT0061 issue two Shunters' Releases, Ground Frames, Switch Panels and Gate Boxes	B1 to B5 and B7 (see impact assessment for details)	07 December 2013
GK/RT0063 issue one Approach Locking and Train Operated Route Release	4.2.2 para 1 & 2	07 December 2013

Other parts of GK/RT0041 issue one, GK/RT0042 issue one, GK/RT0051 issue one, GK/RT0054 issue one, GK/RT0060 issue four and GK/RT0063 issue one, are superseded by GK/RT0055 issue one, Block System Interface Requirements.

Remaining parts of the superseded documents are withdrawn and cease to be in force as of 07 December 2013.

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Supply

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Part 1 Purpose and Introduction

1.1 Purpose

- 1.1.1 This document mandates requirements for:
- a) Ground frames, where control of a part of the railway infrastructure may be transferred between a signaller and a ground frame operator, who may be an employee of a railway undertaking, and
 - b) Shunters' releases, where co-operation is required between the signaller and railway undertaking personnel to allow movements into and out of infrastructure controlled by a railway undertaking.

1.2 Introduction

1.2.1 Background

- 1.2.1.1 This document applies to:
- a) Ground frames, and
 - b) Shunters' releases.
- 1.2.1.2 This document does not include requirements for emergency panels, standby control centres or gate boxes, which are the responsibility of the infrastructure manager.
- 1.2.1.3 GK/RT0036 sets out the requirements for controlling the transition between lineside signalling conforming to Railway Group Standards and other methods of train control where delegated control may also apply.

1.2.2 Related requirements in other documents

- 1.2.2.1 The following Railway Group Standards contain requirements that are relevant to the scope of this document:
- | | |
|-----------|--|
| GE/RT8000 | The Rule Book |
| GE/RT8270 | Assessment of Compatibility of Rolling Stock and Infrastructure |
| GK/RT0036 | Transitions Between Signalling Systems |
| GK/RT0045 | Lineside Signals, Indicators and layout of Signals |
| GK/RT0055 | Block Systems Interface Requirements |
| GO/RT3215 | Requirements for the Weekly Operating Notice, Periodical Operating Notice and Sectional Appendix |
- 1.2.2.2 Where co-operation is required by this document between the infrastructure manager and the railway undertakings in the design of new facilities such as ground frames, ground switch panels and shunters' releases, the process for co-operation is set out in GE/RT8270 Assessment of Compatibility of Rolling Stock and Infrastructure.

1.2.3 Supporting document

- 1.2.3.1 The following Railway Group document supports this Railway Group Standard:
- | | |
|-----------|--|
| GK/GN0677 | Guidance on Ground Frames and Shunters' Releases |
|-----------|--|

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**Part 2 Requirements for Ground Frames and Shunters'
Releases****2.1 Compatibility requirements for ground frames and shunters' releases**

- 2.1.1 Before any new or changed infrastructure or rolling stock (including lineside and / or on-board control, command and signalling equipment) is brought into use, it is necessary to check that it is compatible with the infrastructure and rolling stock assets and operations on the routes on which it is to be used.
- 2.1.2 GE/RT8270 sets out the requirements and responsibilities for the assessment of compatibility between rolling stock and infrastructure assets, including control, command and signalling equipment and their operations. It sets out the arrangements by which the assessment of compatibility is undertaken and identifies those responsible for managing that assessment.
- 2.1.3 This document GK/RT0077 mandates the specific requirements for the assessment of compatibility for ground frames and shunters' releases.
- 2.1.4 The assessment shall check that the provision of the ground frame or shunter's release is compatible with:
 - a) The required documented operations, and
 - b) The access requirements.
- 2.1.5 The assessment shall check that the method of ground frame release is compatible with the block system.
- 2.1.6 The assessment shall check that the ground frame or shunter's release functionality is compatible with:
 - a) The required train movements, and
 - b) The operational risk.
- 2.1.7 On lines worked by electric token block, no signaller token block, no signaller token block – remote or one-train system with staff (see also GK/RT0055), the assessment shall check that the method of issuing and returning the token at ground frames which have shutting-in facilities is compatible with ground frame operations, including either:
 - a) Provision of intermediate token instruments at the ground frame, or
 - b) Local operating instructions.
- 2.1.8 The assessment shall check that the signalling system is configured to prevent insertion of a ground frame key into the wrong release instrument or mechanical lock.
- 2.1.9 The assessment shall check that the provision of signals worked from the ground frame is compatible with the train movements required on the running lines and into sidings.
- 2.1.10 Where non-block signals on running lines are used to protect the ground frame, the assessment shall check that the ground frame operating instructions include a requirement to clear the signals before the release is normalised.