

Information for users

To access individual modules referenced within this standard, blue active links are provided from the relevant index pages where these are listed. Clicking on a specific reference will lead to the corresponding document. Please ensure to open **bookmarks** for easier navigation within the document and to access **index of modules**.

Alternatively, you may use the search facility to search for a specific document by using the complete document reference number – such as NR/L3/SIG/30082/002 – in the search field.

Proceed to document ►

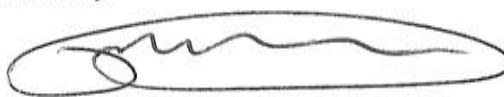
Ref:	NR/L2/SIG/30009
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Level 2

Signalling Principles Handbook

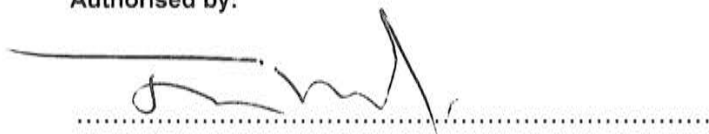
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User information

This Network Rail standard contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – *No variations, could stop the railway*

- **Red requirements shall** always be complied with and achieved.
- Red requirements shall be presented in a red box **with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of red requirements lies with the Professional Head/Standard Owner.
- Red requirements are monitored for compliance.
- Corrective actions shall be enforced if deviations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Amber requirements – *Controlled variations, approved risk analysis and mitigation*

- **Amber requirements shall** be complied with unless deviation has been approved in advance.
- Amber requirements shall be presented with an amber sidebar **and with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of these requirements lies with the Professional Head/Standard Owner, or their nominated Delegated Authority.
- Amber requirements are monitored for compliance.
- Deviations **may** be permitted. Deviations are approved by the Standard Owner or through existing Delegated Authority arrangements.
- Corrective actions shall be enforced if **non-approved** deviations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Green – *Guidance*

- Guidance is based on good practice. Guidance represents supporting information to help achieve **Red** and **Amber** requirements.
- Guidance shall be presented with a dotted green sidebar **and with the word “should” (usually in notes) or as a direct instruction**.
- Guidance is **not mandatory** and is not monitored for compliance.
- Alternative solutions may be used. Alternative solutions do not need to be formally approved.
- Decisions made by a competent person to use alternative solutions should be backed up by appropriate evidence or documentation.

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Issue record

Issue	Date	Comments
1	Dec 07	Initial issue (D110, D120, D310 & E430 issued)
2	Dec 08	2 nd issue (D225, E120 & E440)
3	Sept 09	3 rd issue (D410, E610, F140, F210 & Z110)
4	Dec 09	4 th issue (D220, E450, E810, Z210)
5	Mar 10	5 th issue (C410)
6	Dec 10	6 th issue (E420)
7	03/12/2011	7 th issue (Z115)
8	02/06/2012	8 th issue (F210 (2))
9	06/09/2014	9 th issue – incorporation of former RGS and withdrawal of D110
10	07/07/2015	10 th issue – Modules GERT8071, GK/RT0054, GKRT0060, GKRT0064 & E420 issued

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 06/06/2015.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

Disclaimer

In issuing this document for its stated purpose, Network Rail makes no warranties, express or implied, that compliance with all or any documents it issues is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

Supply

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1 Purpose

This standard mandates the application of the sections of the Signalling Principles Handbook. This is intended to provide instruction and guidance to signalling designers, testers and operators on the application of signalling principles on Network Rail Infrastructure.

The Signalling Principles Handbook has been created to provide information to designers not previously documented in standards. It provides detail on how to apply existing standards, to remove the need for principles related Technical Instructions and to provide a future home for principles currently contained within Group Standards, but which solely apply to Network Rail controlled infrastructure.

2 Scope

This Level 2 standard applies to all signalling schemes and detailed design being developed to amend Network Rail's infrastructure.

The Signalling Principles Handbook consists of a number of individually published modules. Each module contains details of its scope and the requirements for compliance.

3 Definitions

Not used

4 Handbook Structure

The Signalling Principles Handbook is divided into a number of chapters each of which consists of an index (contained in appendices to this specification) and a number of sections. The chapters address different areas of signalling principles although some topics may be addressed by sections in more than one chapter.

4.1 Modules

Each module is a stand alone document which includes its own scope and compliance requirements.

The document identity for a section is in the form NR/L3/SIG/30009/A999 where the letter A is replaced by the chapter identity letter and the three digit number is the section identity within the chapter (000 is reserved for the index).

It is intended that, when in printed form, the modules will be stored with this standard to form a handbook.

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Appendix A - A000 - Purpose of Signalling

Section	Title	Version	Issue Date
A110	The Purpose of Signalling, Functionality & Systems.	Not Issued	