

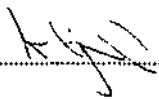
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Business Process Document

Track datum markers on all overhead electrified lines

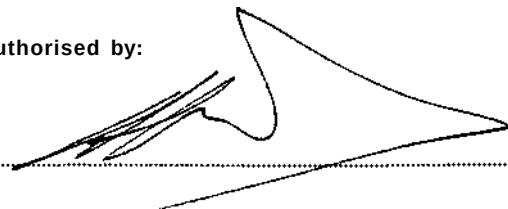
Endorsement & Authorisation

Endorsed by:



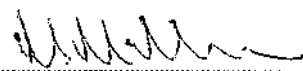
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Issue record

Issue	Date	Comments
2	February 2006	Re-issued as a SAF3 Business Process Document

Implementation

4 February 2006

Compliance

This Network Rail specification is mandatory and must be complied with by Network Rail and its contractors from 4 February 2006

When this specification is implemented, it is permissible for all projects, which have formally completed GRIP Level 4 to continue to comply with the Issue of any relevant Network Rail standards current when GRIP Level 4 was reached and not to comply with requirements contained herein unless the head of electrification and plant has stipulated otherwise in the accompanying briefing note.

Where the head of electrification and plant has specified that all projects will comply with the requirements, specific authority not to comply can be sought in the usual manner using the appropriate non-compliance authority processes described in Network Rail standard, [NR/SP/STP/045](#) *Managing the process for non-compliance authority* (formerly RT/LS/P/045).

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I Purpose

- I.1 The design of overhead equipment is based on the assumption that the geometrical relationship between the contact wire and the pantograph will be maintained at all times within agreed tolerances. Variations in this relationship infringing the agreed tolerances can lead to loss of contact or to infringement of electrical and mechanical clearances between pantographs and fixed structures and, in extreme cases, to pantographs touching fixed structures.
- I.2 Assuming that the relationship between the contact wire and its supporting structure is fixed, the correct pantograph/wire relationship must be ensured by establishing and monitoring the relative positions of the supporting structure and the track. For this purpose, markers are provided on the fixed structure and it is the duty of P-Way and E&P staff to ensure jointly that the track remains in the position specified by those markers, subject to defined tolerances.
- I.3 It is the purpose of this Instruction to define those tolerances, to describe the two types of markers and specify the agreed procedures for installation and checking. It will be circulated to appropriate members of the P-Way Engineering staff, as well as those of the E&P Engineering, with the intention of obviating any misunderstanding between the two departments.

2 Reference documentation

[NR/SP/ELP/21087](#) Specification of maintenance frequency and defect prioritisation of 25 kV overhead line electrification equipment

3 Track tolerances

- 3.1 On lines with overhead electrification, the tolerances about the designed position of the track are stipulated in Para 3.2.8. of the current D.Tp. "Railway Construction and Operation Requirements", on the following basis:

"Close tolerances" apply at all overhead structures where the headroom over any track is less than:

4.78m (15'-8") with 25kV electrification

4.58m (15'-0") with 6.25kV or 1.5kV electrification

Elsewhere, "Full Tolerances" apply.

- 3.2 The appropriate tolerance figures are set down in 6.1 a) and b).