

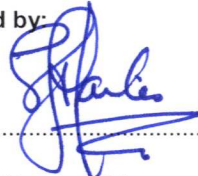
Ref	NR/L3/TEL/30108
Issue	1
Date	August 2007

Level 3

Work Instruction for the Manual Installation of Telecommunications Cables

Endorsement & Authorisation

Endorsed by:



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Accepted for issue by:



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Issue	Date	Comments
1	August 2007	Original

Implementation

This standard shall be implemented from 4th August 2007

Compliance

This Network Rail Level 3 Standard is mandatory and must be complied with by Network Rail Staff and Contractors from 1st October 2007.

When this Level 3 Standard 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 Telecoms Engineering has stipulated otherwise in the accompanying Briefing Note.

Where the Head of Telecoms Engineering 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/L2/STP/001](#) Network Rail Standards Management.

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1 Purpose

This document sets out the principles to be adopted when installing all types of telecommunications cables by hand pulling techniques or the use of motorised winches.

2 Scope

This document describes the practices which shall be followed when installing any telecommunications cables within the railway environment, especially into surface laid troughing routes and cable ducts.

For the purposes of this document telecommunications cables include fibre optic cables, multiple-pair copper cables, screening cables and co-axial cable.

This document excludes the requirements for laying cables from a moving train.

3 Reference documentation

[NR/SP/OHS/019](#)

Protection of People Working On or Near The Line

4 Definitions

Figure Of Eight

Cable looped in a figure of '8' formation to facilitate back pulling while not exceeding the minimum bending radius of the cable.

Installer

The company or individual employed by Network Rail either directly or indirectly to implement the cabling work. This definition includes Network Rail staff and staff used by the principal contractor.

Mechanical Fuse

A mechanical device which is designed to break when the applied tension goes beyond it's specified limit.

Occupation Crossing

A level crossing which does not carry a public road, but one which leads to a farm, factory etc.

Snaking

Deviation of the cable within the cable route caused by the natural lie of the cable and the existing contents of the route.

Telecommunications Cables

Fibre optic cables, multiple-pair copper cables, co-axial cables and screening cables.

'UP'

A term used to indicate a direction of travel on a railway line. This information is recorded in the Sectional Appendix.