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Level 3

Installation of Operational Voice Recorders

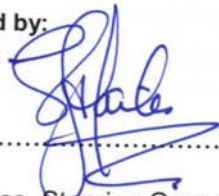
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Issue record

Issue	Date	Comments
1	3 June 2006	First Issue
2	August 2008	Updated to reflect Phase 2A reorganisation
3	March 2010	Updated to reflect Engineering reorganisation

Reference documentation

NR/SP/TEL/30094, *Installation of Telecommunications equipment and systems*

NR/WI/TEL/30102, *Testing requirements – Operational voice recorders*

NR/SP/ELP/27242, *Specification of low voltage electrical installations on railway premises (including plugs, sockets, trailing leads and appliances)*

RT/E/WI/00113, *Wiring of copper telecoms terminations* (NR/WI/TEL/00113)

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 6 March 2010.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

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1 Purpose

This Work Instruction in support of NR/SP/TEL/30094 - Installation of Telecoms Equipment and Systems, mandates the requirements for the installation of operational voice recorders on Network Rail infrastructure which are used to record operational voice circuits.

2 Scope

This Work Instruction applies to all new operational voice recorder installations.

This Work Instruction does not cover the health and safety requirements for the carrying out of the installation and reference should be made to the appropriate standards for planning and carrying out of any work.

When performing like for like renewals the Senior Renewal & Enhancement Engineer [Telecoms] shall assess which elements of this standard apply in consideration of the whole life cost solution.

This document does not cover the testing of newly installed voice recorders which is covered in NR/WI/TEL/30102 Testing Requirements - Operational Voice Recorders

3 Definitions

CSR

Cab Secure Radio

DP

Distribution Point

IDC

Insulation Displacement Connector

IM

Network Rail's internal information management organisation

MDF

Main Distribution Frame

NRN

National Radio Network

NSFS

Non-Switched Fused Spur

NR PE

Network Rail Project Engineer

Operational Equipment/Circuit

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Equipment or circuit that is used for:

- a) authorising and safeguarding the movement of trains
- b) safety related communications systems for the direct operation of the railway

Railnet Telephone

The internal railway telephone network

UPS

Uninterruptible Power Supply

Voice Recorder

A device, which may be integrated into a concentrator or a stand alone unit, used to record voice signals.

4 Installation Requirements

The following sections detail the installation requirements for the installation of voice recorders.

Only product approved voice recorders shall be used.

4.1 Voice Recorder Configuration

The voice recorder shall be configured so that it can record all audio signals within the signal box including, but not be limited to: The concentrator; CSR; NRN; fax machine; British Telecom telephone; Railnet telephone and any additional telephone handsets used within the signal box.

4.2 Voice Recorder Position

4.2.1

The voice recorder shall be positioned and installed in the location previously specified in the detailed design or as previously agreed between the installation team, the local signalling manager and the NR PE.

Where possible the voice recorder should be installed in a position such that it is not on the operational floor taking into account the environmental issues so it will have no detrimental effect on the operation of the voice recorder or any associated components.

4.2.2

The voice recorder shall be positioned and the rack built so that it is accessible for the purposes of maintenance by one person. The voice recorder rack shall be