

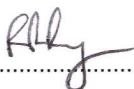
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Issue:	2
Date:	7 th March 2009
Compliance date:	5 th September 2009

Level 2

Specification for the Maintenance of Electronic PABX Switches

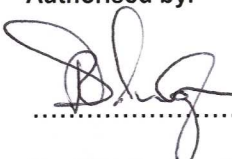
Endorsement and Authorisation

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Issue record

Issue	Date	Comments
1	June 2006	First Issue
2	March 2009	Renumbered, was NR/WI/TEL/30122. Responsibilities previously denoted within each appendix now removed and placed within section 4 (Responsibilities). References to ICC's against each Appendix removed as it is defined in the Scope (section 2).

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 05/09/2009.

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.

Reference documentation

NR/SP/TEL/31001	Telecommunications Maintenance Testing & Failure Investigation
NR/L2/TEL/31002	Maintenance of Telecommunications Equipment.
NR/GN/TEL/30037	Office Telephone Systems Installation
NR/L2/TEL/30081	Maintenance of Telecoms Power Plant and Batteries
NR/L2/TEL/30090	Maintenance of Telecoms Equipment Rooms

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1 Purpose

This instruction defines the maintenance requirements for Electronic PABX switches owned by Network Rail.

The purpose of maintaining PABX switches is to decrease the incidence of failures through deterioration and to identify potential failures before they become service affecting.

2 Scope

This instruction applies to those Network Rail switches which are not leased to a third party and are primarily installed to support Network Rail's business requirement in offices and ICCs.

Electronic PABX Switches which are configured as concentrators and installed to handle safety critical communications, such as those in Signal boxes and Electrical Control Rooms are to be maintained as detailed in NR/L2/TEL/30085 Maintenance of Electronic PABX Concentrators.

The switch installation may, by design, be constructed from a number of remote nodes or shelves. These shall be considered as separate switches and subject to the applicable procedures in the relevant appendix.

The maintenance requirements for the Power Plant and Batteries used to support Electronic PABX switches is detailed in NR/L2/TEL/30081.

The maintenance requirements for Voice Recorders is detailed in NR/L2/TEL/30082.

The testing of emergency facilities (999 – 112 short code dialling) is detailed in NR/WI/TEL/30123, Communications with Emergency Services – ETD Network Testing Procedure.

3 Definitions (in addition to those defined in NR/L2/TEL/31002).

AC

Alternating Current

CDR

Call Detail Recording

DC

Direct Current

DC/AC

A device that converts DC input into an AC output, also includes ringers.

Electronic PABX Concentrator

A telephone concentrator utilising digital switching technology, controlled by software held locally on a storage device.

EMC

Electro Magnetic Compatibility

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ESP

Electrostatic Sensitive Precautions

ESSD

Electrostatic Sensitive Devices

ICC

Integrated Control Centre or Infrastructure Fault Control

LED

Light Emitting Diode

LIMs

Line Interface Modules

MMI

Man Machine Interface

PABX

Private Automatic Branch Exchange

PC

Personal Computer

NTP

Network Terminating Point

SLA

Service Level Agreement

TME

Telecoms Maintenance Engineer

UPS

Uninterruptible Power Supply

4 Responsibilities

The maintainer shall ensure that electro static precautions (ESP) to prevent damage to ESSD are in place before work or inspection commences.

The maintainer shall ensure that, where there is a requirement to provide a backup copy of the system data to be held at a secure location away from site, the location chosen is such that if the backup copy is required, it can be accessed to meet the system SLA for restoration of service.

The maintainer shall come to a clear understanding with the equipment user of the work scope before any maintenance work is undertaken which may impact upon the normal operation of the switch.

All defects identified during maintenance shall be reported to fault control for entry into the fault recording database for further investigation.