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Date:	6 March 2010
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Level 1

Telecoms Testing and Commissioning

Endorsement and Authorisation

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Issue record

Issue	Date	Comments
1	June 2005	First Issue
2	August 2008	Updated to reflect Phase 2A reorganisation
3	March 2010	Updated to reflect Engineering reorganisation

Compliance

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

Reference documentation

NR/L2/EBM/088, *Responsibility for maintenance of changed assets*

NR/L2/TEL/31001, *Telecommunications maintenance testing and failure investigation*

GK/RT0209, *Testing and Commissioning of Signalling and Operational Telecommunication Systems*

Construction (Design and Management) Regulations 2007

Railways (Safety Critical Work) Regulations 1994

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1 Purpose

The purpose of this company standard is to detail the procedure for Testing and Commissioning of telecoms equipment and systems installed on Network Rail controlled infrastructure. It is supported by a number of Business Process Documents that detail how to comply with this company standard and further supported by a number of asset specific test requirements.

2 Scope

This procedure is mandatory on Network Rail and its contractors involved in the telecoms testing and commissioning process as defined below.

This procedure shall apply to both newly installed equipment/systems and to modified or upgraded equipment/systems, except for those undertaken as part of the day-to-day maintenance activities (reference NR/L2/TEL/31001 Telecommunications Maintenance Testing and Failure Investigation).

All safety related operational telecoms equipment/systems shall also comply with GK/RT0209 Testing and Commissioning of Signalling and Operational Telecommunication Systems and the Railways (Safety Critical Work) Regulations 1994.

For non-safety related telecoms equipment/systems the design contractor or installer may undertake the testing and entry into service activities subject to agreement by the Route Asset Manager (S&T) and the Network Rail Project Engineer (NR PE). The NR PE and the Contractors Responsible Engineer/Commissioning Manager (CRE/CM) shall agree the level of testing activity and documentation required for non-safety related telecoms equipment/systems.

This procedure does not detail any occupational health and safety requirements or Construction (Design and Management) Regulation requirements.

3 Definitions

Acceptance

Acknowledgement that the commissioned system meets the requirements of the Project Design Specification.

Commissioning

The process by which equipment/systems are made ready for service following installation and testing, e.g. change-over of systems, transfer of circuits.

Contractors Responsible Engineer

The person within the design organisation with responsibility for the day-to-day management and co-ordination of the technical and engineering activities within the contract. Other competent personnel within the design organisation may carry some of the tasks assigned to the CRE out, however the CRE shall be responsible for their

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delivery. Where the testing and commissioning activity is carried out internal to Network Rail, the CRE shall be assigned, as appropriate, within the project team.

Designer

The organisation or person responsible for the design of the system to the Requirements Specification.

Engineering Remit

Document produced by the Engineering Remit Owner to specify requirements and issued to the delivery organisation by the Sponsor as part of the Project Manager's Remit.

Operational Telecoms Equipment/Systems

Equipment or systems that are used for:-

- Authorising and safeguarding the movement of trains
- Safety related communication systems used for the direct operation of the railway

Person in Charge Of Testing (PICOT)

A competent person responsible for documenting, managing and undertaking the testing and commissioning activities.

Sub-systems

Equipment and application logic which can be combined to form a system (e.g. control equipment, remote equipment, man-machine interfaces, commercial or bespoke software).

System

An organised set of sub-systems, people or procedures capable of providing a service or executing a defined function.

4 Responsibilities

Route Asset Manager (S&T)

Sponsor for Telecoms Renewals Schemes (for Signalling Schemes or Major Projects this role lies elsewhere).

Accept the commissioned equipment/system in to service following handback.

Engineering Remit Owner

Production of the Engineering Remit for Telecoms Renewals Schemes (for Signalling Schemes or Major Projects this role lies elsewhere).

Network Rail Project Manager / Engineering Manager (NR PM/EM)

Arranges sign-off of the Test Strategy and Testing and Commissioning Plan.

Network Rail Project Engineer (NR PE)

Review and approve the Test Strategy and Testing and Commissioning Plan.