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Issue:	2
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Level 3

Engineering and Management Control Arrangements for the National Supply Chain T&RS and OTM Fleet

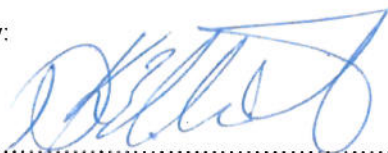
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User information

This Network Rail standard contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – *No variations, could stop the railway*

- **Red requirements shall** always be complied with and achieved.
- Red requirements shall be presented in a red box **with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of red requirements lies with the Professional Head/Standard Owner.
- Red requirements are monitored for compliance.
- Corrective actions shall be enforced if variations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Amber requirements – *Controlled variations, approved risk analysis and mitigation*

- **Amber requirements shall** be complied with unless variation has been approved in advance.
- Amber requirements shall be presented with an amber sidebar **and with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of these requirements lies with the Professional Head/Standard Owner, or their nominated Delegated Authority.
- Amber requirements are monitored for compliance.
- Variations **may** be permitted. Variations are approved by the Standard Owner or through existing Delegated Authority arrangements.
- Corrective actions shall be enforced if **non-approved** variations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Green – *Guidance*

- Guidance is based on good practice. Guidance represents supporting information to help achieve **Red** and **Amber** requirements.
- Guidance shall be presented with a dotted green sidebar **and with the word “should” (usually in notes) or as a direct instruction**.
- Guidance is **not mandatory** and is not monitored for compliance.
- Alternative solutions may be used. Alternative solutions do not need to be formally approved.
- Decisions made by a competent person to use alternative solutions should be backed up by appropriate evidence or documentation.

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Issue record

Issue	Date	Comments
1	December 2011	First Issue
2	April 2014	This standard has been amended to address the recommendations raised by the ORR during their ECM certification of Network Rail with regards to calibrated equipment, competence management, out-of-course repairs, configuration management, maintenance records and safety targets. Further amendments have been made to the document following user feedback and consideration of current TNCs. Specific job titles have been removed from the document and replaced with roles.

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 13 April 2014.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

Reference documentation

NETWORK RAIL HEALTH & SAFETY MANAGEMENT SYSTEM

THE RAILWAYS AND OTHER GUIDED TRANSPORT SYSTEMS (MISCELLANEOUS AMENDMENTS) REGULATIONS 2013

GE/RT8250	REPORTING HIGH RISK DEFECTS
GM/RT2450	QUALIFICATION OF SUPPLIERS OF SAFETY CRITICAL ENGINEERING PRODUCTS AND SERVICES
NR/L1/CPR/103	SUPPLIER ASSURANCE FRAMEWORK
NR/L2/CTM/205	COMPETENCE AND TRAINING FOR THE MAINTENANCE OF TRACTION & ROLLING STOCK AND ON-TRACK MACHINES
NR/L2/RSK/00001	INTEGRATED RISK MANAGEMENT

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1 Purpose

This Network Rail Company Standard defines the minimum engineering and management control arrangements for the National Supply Chain (NSC) relating to all maintenance tasks/works for all Traction and Rolling Stock (T&RS), On Track Machines (OTM) and associated equipment where Network Rail is registered as the Entity in Charge of Maintenance (ECM) on the National Vehicle Register (NVR). This Network Rail Standard describes the minimum engineering and management control arrangements in place for the NSC to comply with RAILWAYS AND OTHER GUIDED TRANSPORT SYSTEMS (MISCELLANEOUS AMENDMENTS) REGULATIONS 2013, and where specified, with the engineering and management control requirements of NR/L1/RMVP/0001 and of NR/L2/RMVP/0090.

2 Scope

This Network Rail Standard is applicable to the NSC teams responsible for the engineering and management control of T&RS, OTM and associated equipment where Network Rail is registered as the ECM on the NVR and where NSC is shown as responsible on the Rail Vehicle Asset Register (RVAR).

This Network Rail Standard is not applicable to the engineering and management control of On Track Plant (OTP), portable/transportable plant, fixed plant and depot plant.

3 Roles and responsibilities

3.1 Roles

Professional Head (Plant and T&RS)

The Professional Head (Plant and T&RS) is accountable for defining policy for the engineering management and assurance of fleet assets.

The appointment and competence requirements for the Professional Head (Plant and T&RS) are detailed in the Network Rail Health & Safety Management System.

Engineering Manager

An Engineering Manager is accountable for all engineering assurance and management arrangements for fleet assets.

Fleet Champion

A Fleet Champion shall be identified for all fleet assets and shall be responsible for delivery of the engineering assurance arrangements for their fleet assets.

Safety & Sustainable Delivery (S&SD) Team

The S&SD team manage all assurance, environmental and safety data for the fleet assets.

Asset Manager

An Asset Manager is accountable for the service delivery of fleet assets.

Asset Engineer

An Asset Engineer shall be identified for all fleet assets and shall be responsible for the delivery of the engineering management arrangements for their fleet assets.

3.2 Responsibilities

Competency assessor

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Assessors are responsible for the completion of competency assessments of the Engineering Manager, Fleet Champions and Asset Engineers.

Engineering change approver

Engineering change approvers have delegated authority from the Professional Head (Plant and T&RS) to approve engineering change requests and associated maintenance documentation.

Responsible Accountable Consulted Informed matrix

Document Clause		Professional Head (Plant and T&RS)	Engineering Manager	Fleet Champion	Asset Manager	Asset Engineer
5	Engineering policy					
5.1	Entity in Charge of Maintenance (ECM)	A/R	C	C	C	C
5.2	Technical maintenance meeting	A/R	C	I	C	I
6	Engineering management arrangements					
6.1	Maintenance requirements	-	-	I	A	R
6.2	Maintenance monitoring	-	I	C	A	R
6.3	Asset management	-	I	C	A	R
6.4	Maintenance management	-	I	I	C	A/R
6.5	Asset data	-	-	I	C	A/R
6.6	Maintenance suppliers	-	-	-	C	A/R
7	Engineering assurance arrangements					
7.1	Safety performance monitoring	I	A	R	I	C
7.2	Engineering change	C	A/R	I	I	I
7.3	Competence	I	A/R	I	I	I
7.4	Level 2 inspections	I	A/R	I	C	I

NOTE Responsible Accountable Consulted Informed (RACI) is a means of linking process steps to roles as follows:

- R; Responsible:** the individual(s) who perform an activity – responsible for action/implementation – although usually only one, Rs can be shared
- A; Accountable:** the individual who is ultimately accountable including yes/no decision and power of veto – only one 'A' can be assigned
- C; Consulted:** the individual(s) to be consulted prior to a final decision being made or action taken – two-way communication

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- d) *I; Informed: the individual(s) who need to be informed after a decision is made or action is taken – one-way communication*

4 Definitions

For the purpose of this standard, the following terms and definitions apply.

Accident

An unwanted or unintended sudden event or a specific chain of such events which have harmful consequences. Accidents are divided into the following categories: collisions, derailments, level crossing accidents, accidents to persons caused by rolling stock in motion, fires and others.

Asset

All T&RS and OTM vehicles where Network Rail is identified as the ECM in the NVR.

Deferred maintenance

Scheduled maintenance tasks/works, or maintenance tasks/works arising from a scheduled examination, that are not carried out at the planned time/date.

Engineering change review (ECR)

Any change to the asset, including; physical changes to assets, trials, changes to maintenance plans, high risk deferrals and non-compliances to company policy.

Entity in charge of Maintenance (ECM)

In respect of the Regulation of the European Railway Agency on a System of Certification for Entities in Charge of Maintenance, an ECM is a Railway Undertaking (RU) and/or infrastructure manager that can meet the requirements of [Commission Regulation 445/2011](#).

Fleet Asset Management System (FAMS)

System which manages the programming, recording and monitoring of fleet asset maintenance activities.

Incident

Any occurrence, other than an accident, associated with the operation of assets and affecting the safety of operation.

Maintenance

The combination of activities, (including; adjustment, checks, replenishment, repairs and examination) required so that an asset can perform its required function for the whole life-cycle.

Maintenance plan

Document(s) which detail the scope and periodicity of all maintenance activities for fleet assets. This includes all running maintenance and overhaul activities required for the whole life of the asset.

Maintenance programme

The programme of maintenance activities for each asset in accordance with the maintenance plan.

National Safety Authority (NSA)

An authority required under European Law of each EU member state. In the UK the role is undertaken by The Office of Rail Regulation.

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National Vehicle Register (NVR)

The register of railway vehicles authorised in Great Britain, required by Regulation 33 of the [RAILWAYS \(INTEROPERABILITY\) REGULATIONS 2006](#).

On Track Machine (OTM)

Any rail mounted machine, whose primary function is for the renewal, maintenance, inspection, or measurement of the infrastructure and permitted by the Rule Book to be moved, either self propelled or in train formation, outside a possession.

Out of course works

Any maintenance, inspections, testing or works required to return a fleet asset to traffic which is outside the scope of the vehicle maintenance plan. For example;

- repairs due to crash damage, fire or derailment
- temporary modifications or repairs to rectify faults
- short term fitment of a non-standard part due to stock unavailability
- emergency requirement to deviate from the maintenance instruction (e.g. if the instruction is found at late notice to be incorrect)

Rail Vehicle Asset Register (RVAR)

A database that holds asset data for Network Rail owned and leased vehicles.

Traction and Rolling Stock (T&RS)

Any rail mounted asset whose primary function is propel or carry goods, equipment and personnel.

Work order

Information supplied to the maintainer to detail the scope of work required at a maintenance event.

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5 Engineering Policy

5.1 General

The Professional Head (Plant and T&RS) is accountable for setting engineering policy for the safe and compliant delivery of all maintenance, overhaul, repairs and modification works completed on Network Rail fleet assets.

The Professional Head (Plant and T&RS) shall maintain a list of nominated delegates who can perform the accountabilities and responsibilities identified in this instruction.

5.2 Entity in Charge of Maintenance

The Professional Head (Plant and T&RS) is accountable for the compliance of the fleet with the ECM regulations. The Professional Head (Plant and T&RS) shall lead all communication with the ORR and collate and submit the Annual Maintenance Report. The Annual Maintenance Report shall cover the following areas:

- a) Explanation and justification as to how non-conformities have been undertaken and/or solved
- b) Information on the volume of maintenance carried out during the period in which the report covers
- c) Changes related to the following areas:
 - i) Legal ownership of the company
 - ii) Organisation of Network Rail
 - iii) Assets maintained
 - iv) Sites and contractors including processes and equipments (internal/external activities related to maintenance development, fleet maintenance management and maintenance delivery)
 - v) Contractual arrangements (mainly keepers and also exchange of data)
 - vi) Maintenance system including ECM management functions and the three maintenance functions
 - vii) Defects and failures including information exchanged against Article 5(5) of the ECM Regulation
 - viii) Internal audit reports
 - ix) National Safety Authority (NSA) and other authorities' enforcement actions/investigations including claims
 - x) Competence management.

5.3 Technical Maintenance Meeting

The Professional Head (Plant and T&RS) is responsible for chairing a periodic Technical Maintenance Meeting. The minimum quorum for meeting is:

- a) Professional Head (Plant and T&RS) (or their delegate)
- b) Engineering Manager(s) (or their delegate)
- c) S&SD Representative(s)
- d) Asset Engineer(s) (or their delegate)