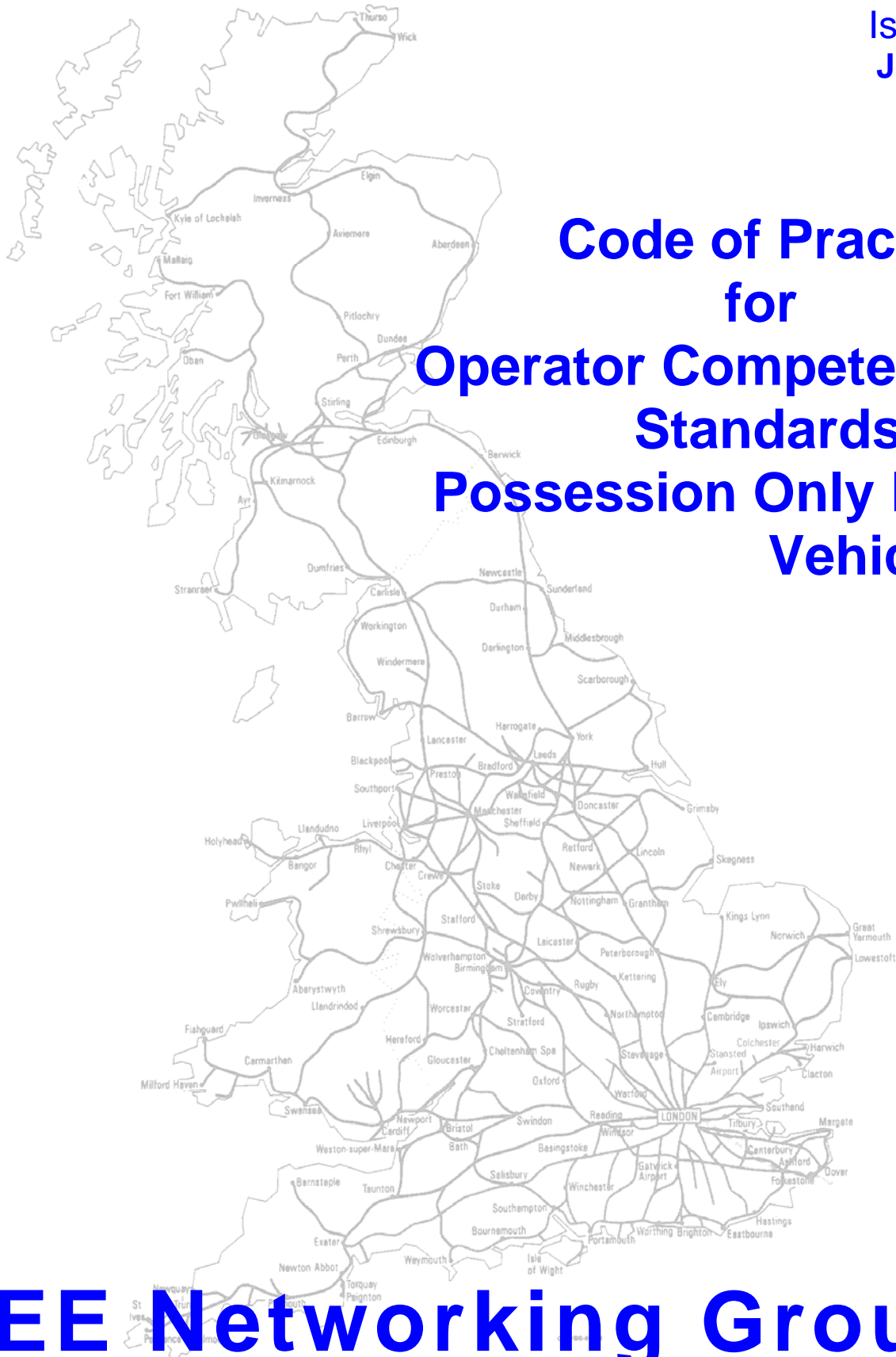


**COP0001**

Issue 5

July 07



**Code of Practice  
for  
Operator Competency  
Standards for  
Possession Only Rail  
Vehicles**

**M&EE Networking Group**

## Document revision history

Issue	Date	Reason for change
1	1996	First issue (now withdrawn)
2		Re-issued following review (now withdrawn)
3	Nov 2001	Re-issued following review (now withdrawn)
4	Sept 2006	Re-issued following review (now withdrawn)
5	July 2007	Revised to incorporate Codes of Practice COP0004 and COP0006 both of which are now withdrawn.

## Background

A sub-group of the M & EE Networking Group have looked at operator competency standards for Possession Only Rail Vehicles and recommend the following as best practice for the Industry.

GROUP MEMBERS	REPRESENTATIVE	POSITION	DATE
Amec Spie Rail	<i>M. Scully</i>	Plant Engineer	11.7.07.
Amey Infrastructure Services	<i>J.A. Nobby</i>	Mech. Assurance Eng	11.7.07
Balfour Beatty Rail Plant	<i>R.W.S.</i>	Plant SC MANAGER	11.7.7
Carillion	<i>P. Henderson</i>	Prof Head Plant Eng	11.7.07
First Engineering	<i>[Signature]</i>	Senior M&EE	
Harsco Track Technologies	<i>[Signature]</i>	Engineering Director	11 July 2007
Jarvis Rail	<i>Stephen Cooper</i>	Chief Mech & Elec Eng	11.07.07
Grantrail	<i>A. Colyer</i>	Plant Operations Mgr	11-7-07
Rail Plant Association	<i>[Signature]</i>	ASSOCIATION MANAGER	11/07/07
Seco-Rail	<i>[Signature]</i>	Head of Plant	
RSSB	<i>M. James</i>	Principal Plant Engr.	11.7.07
Network Rail	<i>[Signature]</i>	HEAD OF RAIL VEHICLE ENG	20/7/07

### SUB-GROUP CONTACTS

Andy Ellis	Network Rail, 4B George Stephenson House, Toft Green, York YO1 6JT	Tel 01904 383003
Chris Sayers-Leavy	Network Rail, Floor 3, 40 Melton Street, Euston Square, London NW1 2EE	Tel 0207 557 8188
Steve Wadham	Gamble Rail, Nowhurst Business Park, Broadbridge Heath, West Sussex RH12 3PL	Tel 01403 213716
Brian Peaple	AMEC Spie Rail (UK) Ltd., Fairburn Close, Off Beaumont Road, Purley, Surrey CR8 2EJ	Tel 0208 667 2594
Alan D Jones	Network Rail, Axis House, 10 Holliday Street, Birmingham, West Midlands B1 1TE	Tel 0121 654 4242
Simon Whatley	SRS Systems Ltd, 3 Riverside Way, Gateway Business Park, Bolsover, Derbyshire S44 6GA	Tel,0870 050 9244

## Purpose

This Code of Practice details the minimum competencies required to operate Possession Only Rail Vehicles on Network Rail managed infrastructure in accordance with the Rule Book. These requirements are in addition to competencies required to operate the machine in a non-rail environment.

## Scope

This Code of Practice covers the operation of all Possession Only Rail Vehicles on Network Rail managed infrastructure.

## Definitions

### **Possession Only Rail Vehicle**

Vehicles with rail wheels capable of running on railway track, limited by their engineering acceptance to running within a possession only. These comprise rail mounted maintenance machines (RMMM's), road-rail vehicles (RRV's), and trailers.

### **Rail Mounted Maintenance Machine (RMMM)**

A vehicle that can travel on rail under its own power system. Such vehicles are not allowed to operate, work or travel outside possessions. Rail in this definition refers to permanent rails intended for use by normal rail vehicles.

### **Road Rail Vehicle (RRV)**

A vehicle that can travel on the road under its own power and also travel on rail by virtue of a rail wheel guidance system under its own power system. Such vehicles are not allowed to operate, work or travel on rail outside possessions.

### **Trailer**

A non self-propelled, rail mounted vehicle capable of being towed or propelled (this includes attachments with more than two rail wheels).

### **Excavator crane**

A machine constructed for excavation purposes that is converted to undertake lifting duties for the rail industry

## 1 Competency

### 1.1 Generic Competency

- 1.1.1 The minimum competency requirements for operators of all Possession Only Rail Vehicles are:
- a) Current Personal Track Safety (PTS) certificate with normal colour vision.
  - b) Correct operation of the specific machine in all modes required for the duties to be undertaken.
  - c) The correct procedure for On and Off-Tracking as detailed in the Certificate of Engineering Acceptance.
  - d) Correct pre-work check of the machine (including on track functional brake tests).
  - e) The procedure for reporting defects.
  - f) Correct setting of machine configuration for the duties to be undertaken including use on cants and gradients.
  - g) Understanding and use of the required documentation for the activities to be undertaken including:
    - i) log book
    - ii) duty charts
    - iii) statutory inspection reports
    - iv) lifting accessory documentation
    - v) Engineering Acceptance Certificates including limitations to use
    - vi) Operating manuals and/or instructions.
  - h) Understanding of emergency procedures including fire, stowage, towing and emergency protection of the line.
  - i) Safety critical communications.
  - j) Generic and machine specific speed restrictions / limits.
  - k) Competent in:
    - i) the rules for the operator as shown in Rule Book module OTP
    - ii) the relevant sections of Rule Book module S1.

- l) An understanding of the requirements of:
  - i) the relevant parts of Rule Book Modules G1, T3, T4, T11 and TW8
  - ii) Track Safety Handbook.
- m) Identification of the correct setting of points and crossings for the intended machine movement.
- n) Hazards and restrictions when working in areas with overhead electrical traction supply equipment, D.C. 3rd/4th rail electrified lines or overhead electricity supply lines.
- o) Personal Protective Equipment (PPE) requirements.
- p) Awareness of Railway Industry Standards RIS-1530-PLT and RIS-1700-PLT.
- q) Safe use and operation of all trailers, attachments and/or accessories to be used.
- r) Compliance with the requirements of M&EE Codes of Practice:
  - i) COP0007 On/Off Tracking
  - ii) COP0014 Trailers and Attachments
  - iii) COP0019 Action to be taken in the event of Accident or Incident with a Possession Only Rail Vehicle.
- s) An understanding of M&EE Code of Practice COP0016 Machine and Crane Controller Check List.

## 1.2 RRV Excavator & Excavator Crane Operators

- 1.2.1 In addition to the generic competencies described in 1.1 above the minimum additional competencies for operators of road-rail excavators and excavator cranes are:
- a) Current CPCS certification for excavator in road mode
  - b) Correct operation of the specific machine in all modes of its operation (e.g. rail mode, road mode, static lifting, excavating, travelling with a load, etc.) and specific configurations (e.g. off-set boom, thimbling, tamping, lifting, regulating, sleeper changing, etc.) for the duties to be undertaken.
  - c) Correct lifting procedures and use of the Rated Capacity Indicator (RCI) covering:
    - i) assessing weights / radius
    - ii) use of Lifting Accessories
    - iii) reading duty charts and setting RCI correctly
    - iv) lifting on-rail & off-rail (including lift and carry)
    - v) lifting and lowering on a cant or gradient (high and low working)
    - vi) correct action in the event of RCI failure including Crane Controller's duties
    - vii) movement limiting devices and working restrictions
    - viii) hand signals
    - ix) tandem lifting (additional risk assessment requirements and written methods of working)
    - x) handling rail and thimbling.
  - d) Correct use of radios.
  - e) An understanding of the requirements of the "Ground Disturbance" Regulations.
  - f) Compliance with the requirements of M&EE Codes of Practice:
    - i) COP0005 Rail Thimbling
    - ii) COP0008 Tandem Lifting

- iii) COP0015 Load Lifting Points on Road-Rail Excavator Cranes
- g) An understanding of the requirements of the relevant sections of Railway industry Standards RIS-1530-PLT and RIS-1700-PLT.

### **1.3 Operators of RRV's Other than Excavators & Excavator Cranes**

- 1.3.1 In addition to the generic competencies described in 1.1 above the minimum additional competencies for operators of road-rail vehicles other than excavators and excavator cranes are:
- a) Correct operation of the specific machine in all modes of its operation for the duties to be undertaken (e.g. rail mode, road mode, static lifting if applicable, working mode, etc.).
  - b) Correct setting of the machine configuration for the duties to be undertaken (e.g. suspension restriction system, locking of steering in rail mode, etc.).
  - c) Correct lifting procedures if lifting duties are to be undertaken including use of the Rated Capacity Indicator (RCI) if fitted, covering:
    - i) assessing weights / radius
    - ii) use of Lifting Accessories
    - iii) reading duty charts and setting RCI correctly
    - iv) lifting on-rail & off-rail (including lift and carry)
    - v) lifting and lowering on a cant or gradient (high and low working)
    - vi) correct action in the event of RCI failure including Crane Controllers duties
    - vii) movement limiting devices and working restrictions
    - viii) hand signals.
  - d) Correct use of radios.

- e) Compliance with the requirements of M&EE Code of Practice COP0020 Work Restraint Anchor Points on MEWP's.
- f) An understanding of the requirements of the relevant sections of Railway industry Standards RIS-1530-PLT and RIS-1700-PLT.
- g) Current CPCS certification in road mode if the RRV is a dozer.

## 1.4 RMMM Operators

1.4.1 In addition to the generic competencies described in 1.1 above the minimum additional competencies for operators of Rail Mounted Maintenance Machines (RMMM) are:

- a) Correct operation of the specific machine in all modes of its operation for the duties to be undertaken (e.g. rail mode, road mode, static lifting if applicable, working mode, etc.).
- b) Safe access to work sites and safe On and Off-tracking including:-
  - i) correct loading / unloading from road vehicles adjacent to running lines and under OHLE
  - ii) Safely securing machine on stillage where provided.
- c) Correct lifting procedures if lifting duties are to be undertaken including use of the Rated Capacity Indicator (RCI) if fitted covering:
  - i) assessing weights / radius
  - ii) use of Lifting Accessories
  - iii) reading duty charts and setting RCI correctly
  - iv) lifting on-rail & off-rail (including lift and carry)
  - v) lifting and lowering on a cant or gradient (high and low working)
  - vi) correct action in the event of RCI failure including Crane Controllers duties
  - vii) movement limiting devices and working restrictions

viii) hand signals.

- d) An understanding of the requirements of the relevant sections of Railway industry Standards RIS-1530-PLT and RIS-1700-PLT.

## **2 Certification**

2.1 Operators competency certificates need to include the following:-

- a) mode of operation.
- b) machine configuration.
- c) attachments.
- d) expiry date.
- e) examiner details.
- f) authorising manager and company details.

## References

<b>Document</b>	<b>Title</b>
<b>BS 7121</b>	Safe Use of Cranes
<b>CPCS</b>	Construction Plant Competency Scheme
<b>GE/RT8000</b>	Rule Book
<b>HSG47</b>	Avoiding Danger from Underground Services
<b>LOLER</b>	Lifting Operations and Lifting Equipment Regulations
<b>M&amp;EE COP0005</b>	Handling Rail & Thimbling with Road-Rail Vehicles
<b>M&amp;EE COP0007</b>	On/Off Tracking of Road Rail Machines
<b>M&amp;EE COP0008</b>	Tandem Lifting with two Road/Rail cranes
<b>M&amp;EE COP0011</b>	Planning and Executing Lifting Operations
<b>M&amp;EE COP0014</b>	Trailers and attachments with RRV's an RMMM's
<b>M&amp;EE COP0015</b>	Load Lifting Points on Road-Rail Excavator Cranes
<b>M&amp;EE COP0016</b>	Machine and Crane Controller Check List
<b>M&amp;EE COP0019</b>	Action to be taken in the event of accident or incident with a Possession Only Rail Vehicle
<b>M&amp;EE COP0020</b>	Work Restraint Anchor Points on MEWP's
<b>PUWER</b>	Provision and Use of Work Equipment Regulations
<b>RIS-1530-PLT</b>	Engineering Acceptance of Possession-only Rail Vehicles and Associated Equipment
<b>RIS-1700-PLT</b>	Rail Industry Standard for Safe Use of Plant for Infrastructure Work
<b>RT/LS/P/046</b>	Network Rail Train Operations Manual
<b>RT3170</b>	Track Safety Handbook