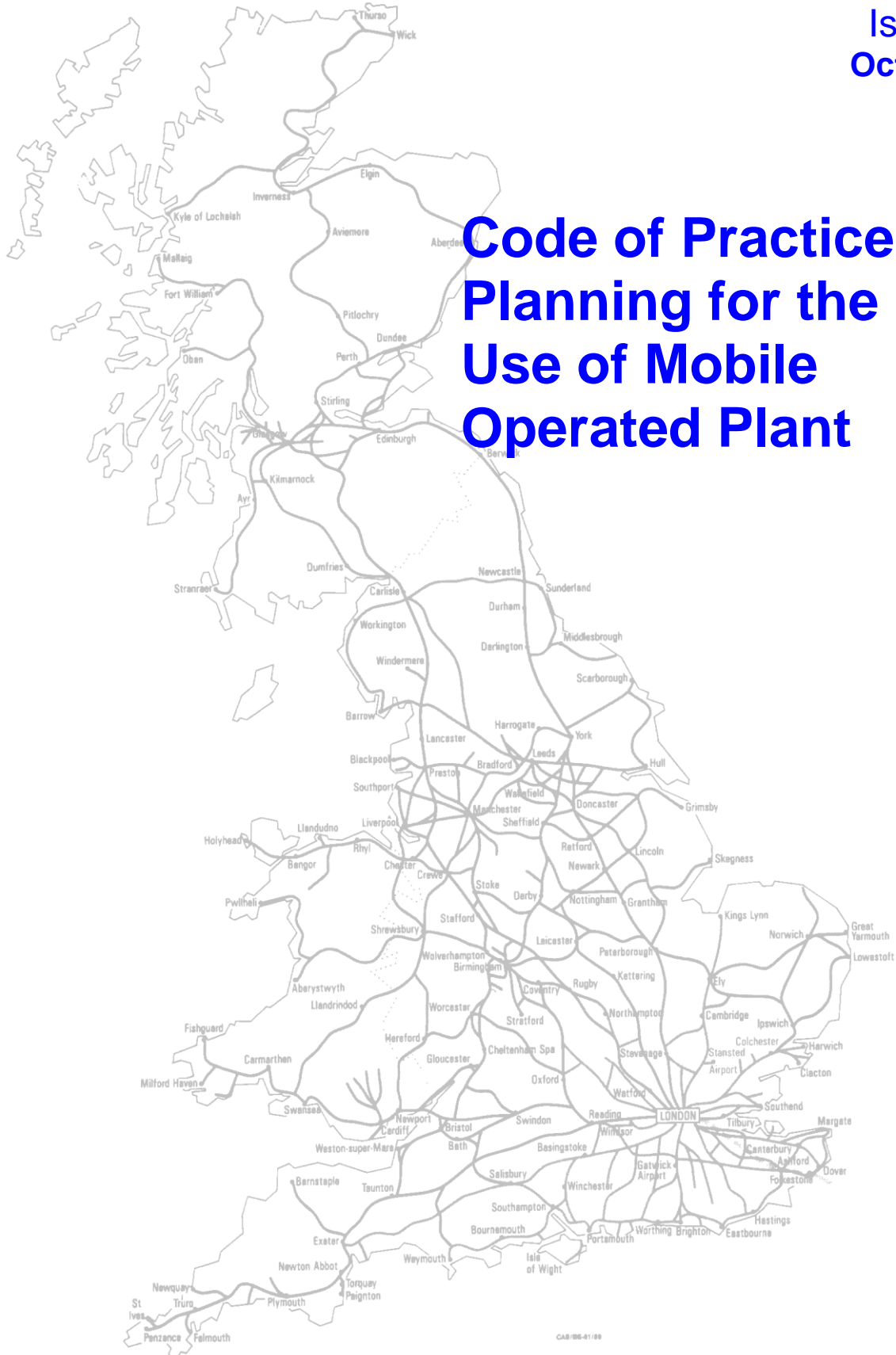


COP0002

Issue 9
Oct 2015



M&EE Networking Group

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Document revision history

Issue	Date	Reason for change
1	Aug 1997	First issue (now withdrawn)
2	Sep 1999	Reissued following review (now withdrawn)
3	Nov 2001	Reissued following review (now withdrawn)
4	Dec 2006	Reissued following review (now withdrawn)
5	Mar 2009	Re-issue following complete review and realignment of COP0011 and COP0002 (now withdrawn)
6	Mar 2009	Re-issued to correct incorrect reference to HSE Guidance Note (now withdrawn)
7	Jul 2010	Review following the recent COP0016 issues and realignment of COP0002 and COP0011 in respect of planning and lifting operations; requirements for competency of lift planners removed (now withdrawn)
8	Mar 2014	Reissued following periodic review and scope extended to include all mobile operated plant used on or near the line. Now also includes requirements for loading/unloading of mobile operated plant from trailers. (now withdrawn)
9	Oct 2015	Reissued to reflect consideration of interface requirements when undertaking planning.

Background

A sub-group of the M&EE Networking Group have looked at the arrangements for planning for the use of mobile operated plant. The M&EE Networking Group recommend this COP as good practice for the industry.

M&EE COPs are produced for the benefit of any industry partner who wishes to follow the good practice on any railway infrastructure. Where an infrastructure manager has mandated their own comparable requirements, the more onerous requirements should be followed as a minimum for work on their managed infrastructure.

The M&EE Networking Group makes no warranties, express or implied, that compliance with this document is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

Sub-group Contacts

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Sign off

The M & EE Networking Group agreed and signed off this Code of Practice on 30 October 2015 (in correspondence) and published on 05 December 2015

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Purpose

This Code of Practice details minimum requirements for planning for the use of mobile operated plant excluding lifting operations.

Scope

This Code of Practice applies to mobile operated plant used both within engineering possessions and on or near the line. This includes OTP, attachments, civils construction plant and traction and rolling stock.

NOTE: The planning and execution of lifting operations including attachments are outside the scope of this document and are detailed in COP0011.

NOTE: Specific information on the use of MEWP's can be found in COP0024.

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Definitions

Attachments An attachment is any equipment that is mechanically fixed to and/or powered or controlled from the host vehicle; this could be an accessory for lifting.

NOTE Mechanically fixed should be taken to indicate that the attaching point is semi-permanent (very often a Quick Hitch type device). Equipment which requires skilled fitting staff to assemble/remove should not normally be thought of as an attachment – such equipment is a part of the original vehicle, and its addition is a modification to the vehicle.

Competent person (CP) Person who has been assessed as being qualified and having required practical and theoretical knowledge, experience and skills to carry out a particular role with regard to relevant rules, regulations, instructions or procedures.

Equipment Includes but is not limited to: plant, attachments, traction and rolling stock, small tools and equipment, gauges etc.

Machine Controller Is the competent person who controls the safe operation of on-track plant.

On Track Plant (OTP) Also known as 'in possession only rail vehicles' and includes road-rail vehicles (RRV), rail-mounted maintenance machines (RMMM) and their trailers and attachments with guidance wheels.

On or Near the Line Within 3 metres of the nearest rail or on the line itself.

1 Planning of Operations (General)

1.1 Definition of Planning

1.1.1 Planning in the context of this code of practice refers to:-

- a) consideration of the Infrastructure Manager's requirements and limitations.
- b) analysis of planned activities and site constraints/hazards in order to identify appropriate type of equipment for the work to be undertaken safely.
- b) identification of competence requirements of site staff involved in deploying equipment.
- c) identification of necessary resource required.
- d) production and documenting of safe systems of work.
- e) Change control
- f) contingency/emergency planning.

1.2 Stages of Planning

1.2.1 The following 'stages' are the minimum requirements to be considered when planning the use of any mobile operated plant. All persons involved in planning these activities should have a knowledge and understanding of stages a) – h):

- a) identify work required.
- b) identify hazards through site survey as appropriate.
- c) develop method of work, identifying plant requirements.
- d) establish manpower requirements and competencies.
- e) determine possession and isolation arrangements.
- f) identify the contingency and emergency requirements.
- g) document the plan.
- h) Change control

2 Stages of Planning of Operations

2.1 Stage a) Identify Work Required

2.1.1 Nature and scope of work activity needs to be established.
(Examples listed below):

- inspection.
- installation/construction.
- demolition.
- vegetation control.
- material and/or personnel transport.
- infrastructure maintenance/renewal (identify specific tasks required, examples below):
 - excavating.
 - changing rails .
 - drain/cess clearance etc.
- electrification.

2.2 Stage b) Identify Hazards Through Site Survey as Appropriate

2.2.1 Identification of hazards, risks and restrictions associated with work requirements identified above, this should include consideration of the interfaces between equipment, infrastructure, people and process and how they may change within the geography of the work site, stages of work and external influences (Examples listed below):

- buried services (refer to HSG47 – avoiding danger from underground services, available at www.hse.gov.uk website).
- lifting requirements.
- overhead power lines (refer to GS6 - avoiding danger from overhead power lines, available at www.hse.gov.uk website).
- OLE, staggered isolations, cross track feeders.
- DC conductor rail floating sections.
- on and off tracking (refer to M&EE COP0007).
- limited and restricted clearances.

- structures (signal posts, OLE stanchions, bridges, buildings, tunnels, platforms etc).
- level crossings, points & crossings, road closures.
- S&T cables, equipment and bonding cables, troughing and troughing routes.
- infrastructure features including catch pits, culverts, axle counters, TPWS grids etc.
- track layout, raised check and guard rails, gradient, cant, line speeds, railhead conditions, grease pots, direction of travel etc.
- environmental hazards & special considerations e.g. noise, working over water/enclosed spaces, sites of special scientific interest etc. local authority restrictions.
- working in tunnels including clearances, refuges and fumes/ventilation.
- track access constraints.
- lines open to traffic (refer to M&EE COP 032)
- Loading of wagons and physical constraints as a result of equipment and infrastructure such as low wire height.

Note: This list is not exhaustive

2.3 Stage c) Develop Method of Work, Identifying Equipment Requirements

- 2.3.1 Taking account of the work, site hazards and constraints identified above, develop the method of work to be undertaken and appropriate equipment to be used.
- 2.3.2 The following should be considered when selecting the optimum equipment for the planned work:
- a) Loading/unloading
 - b) delivery/access requirements and restrictions.

NOTE: When loading/unloading mobile operated plant from OTP trailers please (refer to M&EE COP0017 for additional guidance).

- c) on and off tracking, (refer to M&EE COP0007).
- d) Engineering Acceptance Certificate limitations.

- e) cant.
- f) gradients.
- g) working adjacent to open lines (refer to M&EE COP 0032)
- h) travel speed.
- i) towing and propelling capability.
- j) machine specification etc.
- k) electrified lines (OLE & Conductor Rail).
- l) interface with other work and plant.
- m) storing and accessibility of attachments.
- n) re-fuelling requirements, site storage .
- o) possession and protection arrangements required (e.g. clearance requirements, gauge infringement etc).
- p) communication arrangements (PICOP/ES/MC/CC/COSS/operator).
- q) plant work rates (productivity).
- r) specific machine hazards (available in machine specific risk assessments).
- s) potential plant availability.
- t) provision of adequate site lighting.

2.4 Stage d) Establish Manpower Requirements and Competencies

2.4.1 Taking account of work and plant requirements, identify the following resources with the associated competencies:

- a) machine operator(s).
- b) machine controller(s) (for supervising plant in rail mode and on/off/cross-tracking).
- c) banksmen.
- d) other machine/work specific manpower.

2.5 Stage e) Determine Possession and Isolation Arrangements

2.5.1 Taking account of work activities and plant requirements, including access arrangements, ensure that possession and

isolation arrangements are adequate.

- 2.5.2 Identify lines likely to be fouled in order to determine and document the necessary possession and protection arrangements (refer to M&EE COP 0032).
- 2.5.3 Identify the control arrangements for all level crossings within the worksite.

2.6 Stage f) Identify Required Contingencies

- 2.6.1 Taking stages a) – e) into account, and using historical data and experiences, determine any additional emergency and/or contingency arrangements that may be required to mitigate unplanned events such as:
- machine failures.
 - fire.
 - adverse weather.
 - Collision and derailment
 - Staffing issues (including staff shortages, fitness for duty)
 - delays (track access, engineering trains, over running works etc.)

This list is not exhaustive

2.7 Stage g) Document the plan

- 2.7.1 Taking stages a) – f) into account, the method of work, machine and resource requirements, type of machine including limitations and restrictions should be documented for inclusion in the site specific method statement.

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References

Document	Title
M & EE COP0005	Handling Serviceable Rail with Road-Rail Excavator Cranes in Rail Mode including Thimbling
M & EE COP0007	Code of Practice for On and Off Tracking of Road-Rail Vehicles
M & EE COP0008	Code of Practice for Tandem Lifting with Two Excavator Cranes
M & EE COP0011	Code of Practice for Planning and Executing Lifting Operations
M & EE COP0024	Code of Practice for Use and Loading of MEWPs
M & EE COP0027	OTP Recovery
M & EE COP0032	Code of Practice for Any Line Open (ALO) Working
HSG 47	Avoiding danger from underground services
GS6	Avoiding danger from overhead power lines