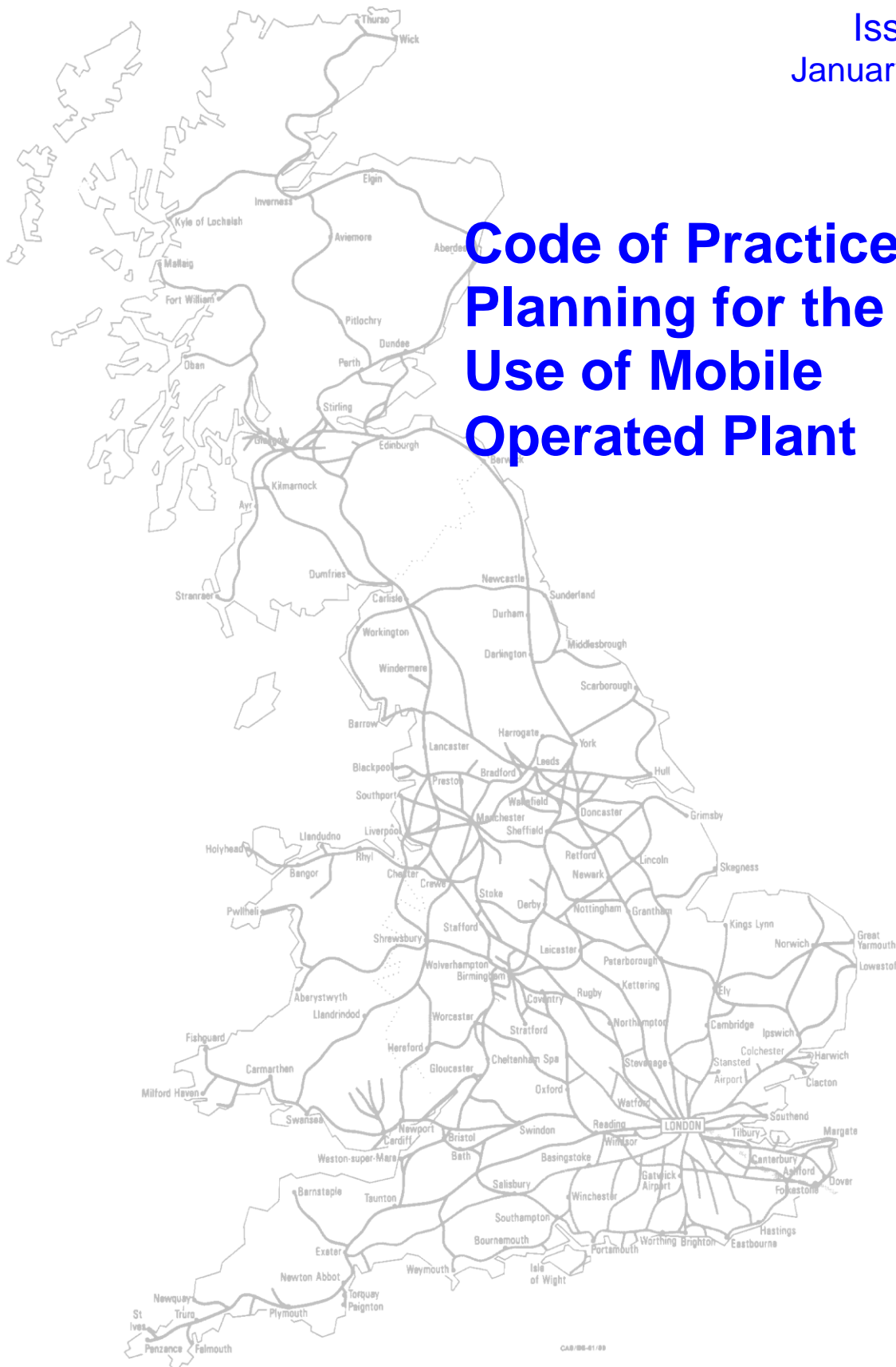


COP0002

Issue 10

January 2018



M&EE Networking Group

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Document revision history

Issue	Date	Reason for change
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 Now also includes requirements for loading/unloading of mobile operated plant from trailers (now withdrawn)
9	Jul 2015	Reissued to reflect consideration of interface requirements when undertaking planning (now withdrawn)
10	Jan 2018	Periodic review and alignment to cover all infrastructures

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.

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Sign off

The M&EE Networking Group agreed and signed off this Code of Practice on 17 January 2018 and published on 3 March 2018

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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 1: The planning and execution of lifting operations including attachments are outside the scope of this document and are detailed in COP 0011.

NOTE 2: Specific information on the use of MEWP's can be found in COP 0024.

NOTE 3: Specific guidelines on the OTP Recovery can be found in COP 0027

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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 a lifting accessory.
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.
Demountable Machine	A machine that can travel on rail under its own power system. Such machines 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.
Equipment	Includes but is not limited to: plant, attachments, traction and rolling stock, small tools and equipment, gauges etc.
Machine Controller (MC)	The competent person who controls the safe operation of On Track Plant
On or Near the Line	Within 3 metres of the nearest rail or on the line itself.
On Track Plant (OTP)	Machines with rail wheels capable of running on railway track, limited by their engineering acceptance to running within a possession only. These comprise: demountable machines, road rail vehicles (RRVs) and trailers.
Plant operations provider	The company or organisation approved to carry out plant operations on the railway infrastructure.
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.

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
- c) identification of competence requirements of site staff involved in deploying equipment
- d) identification of necessary resource required
- e) production and documenting of safe systems of work
- f) Change control
- g) 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 staff resource 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

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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/enhancement (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 (refer to COP0011)
- 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

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- 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
 - any 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 Conformance Certificate (ECC)/Engineering Acceptance Certificate (EAC) 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 as identified by the Infrastructure Manager
- 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 Staff Resource 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 staff resource

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/recovery (COP 0027)
- 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.