COP0126
Issue 1
November 2016

Code of Practice for Management of OTM Speeds within T3 Engineering Possessions

M&EE Networking Group
Document revision history

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<th>Issue</th>
<th>Date</th>
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<tr>
<td>1</td>
<td>Nov 2016</td>
<td>First issue</td>
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**Background**

A sub-group of the M&EE Networking Group have looked at the process for the management of OTM speeds within T3 Engineering Possessions. The M&EE Networking Group recommend this COP as good practice for the industry.

It was found through investigations into collisions involving OTM/Engineering trains within T3 engineering possessions that excessive speed was often a contributory factor. Currently the Rule Book states that movements must not exceed 40mph when entering, making a movement within, or leaving the possession.

In response to the RAIB reports there have been numerous national cross industry workshops with the goal of reducing the risk from collisions within T3 possessions. One output from the workshops was to clarify the “proceeding at caution” speeds both within worksites and PICOP controlled areas to minimise the risk.

Through the M&EE networking group additional proactive OTDR analysis was undertaken looking specifically at speeds within a possession, it was found on review that a significant proportion of the downloads were noted to be around 20 mph to 25 mph.

Feedback from OTM staff tells us that there are issues with the communication of information in relation to OTM movements and speeds within T3 Engineering Possessions. This is a priority for them and is an area we need to focus on more to ensure that a coordinated approach to the provision of information for OTM Movements and speeds within T3 Engineering Possessions is appropriate.

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

OTM Operations group

Alan Smith (Chair)  alan.smith@bbrail.com
John Shields  john.sheilds@babcock.co.uk
Neal Fussey  neal.fussey@volkerrail.co.uk
Andrew McCall  andrew.mccall@colasrail.co.uk

Sign off

The M&EE Networking Group agreed and signed off this Code of Practice on 23 November 2016 and published on 04 March 2017, following approval and company briefings this COP will become live on Saturday 03rd Dec 2016

Amey  N Whisler  Driving Standards Manager
Babcock  J Shields  Operations Standards Manager
Balfour Beatty Rail  A Smith  Driving Standards Manager
COLAS RAIL  A McCall  Rail Operations Standards Manager
Harsco Rail Ltd  S Gear  OTM Operations Manager
VolkerRail  N Fussey  Operations Manager

Purpose

This Code of Practice contains guidance and generic good practice for the management of OTM speeds within T3 Engineering Possessions. It sets out the minimum requirement for these arrangements to minimise the risk associated with working into, within and leaving T3 engineering possessions and provides individual companies with a framework that they can tailor according to local circumstances.

The requirements within this document have been established to assist the M&EE Networking Group to control interface risks that have been identified and that require a degree of reciprocal action and co-operation.

This document is a guide for railway undertakings who are engaged with train / operational movements within a T3 Engineering possession.

Scope

This Code of Practice is intended to reflect good practice and is advisory only. The extent to which a receiving organisation chooses to comply with any or all of its contents is entirely at its own discretion.

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.

Further guidance can be found with the organisations who are required under The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) 1 to make provisions within their Safety Management System (SMS) to ensure, so far as is reasonably practicable, that the competence of all safety-critical staff under their control is developed and maintained to a minimum safe standard.
1. Supporting documents

1.1 This COP supports the relevant provisions in the National Operating Publications (NOPS) and does not amend or alter their provisions in any way.

1.2 The following documents support this COP:

- Rule Book Module T3 Possession of a running line for engineering work.
- Professional driving policy (individual companies)
- Professional Driving Key Principles appendix A
- M&EE Possession of the line & proceeding at caution appendix B
- Proceeding at caution guidance (RSSB) - Please refer to RSSB proceeding at caution guidance. This can be obtained via your operations team or by visiting www.opsweb.co.uk
- Route conducting policies (individual companies)
- RED 40 ‘Driving at caution’ – raises the question of what driving at caution (the term previously used for proceeding at caution) really means; and advises on the correct way to contact a driver on the move.
- RED 42 ‘Challenge. Don't Assume’ - highlights the need for clear communications and the importance of speaking out if you are unsure about the safety of any task you are asked to perform.
2. **Responsibility**

2.1 This Code of Practice is made available to all members of the M&EE Networking Group and industry partners. Recipients should ensure that copies are made available as required to those within their own organisations for whom its content is relevant.

3. **Aims and Objectives**

3.1 The principal aims and objectives of this document is the prevention of collisions within T3 Engineering Possessions by combining the reduction of speeds as a result of risk assessment, the provision of more detailed information on the term ‘proceeding at caution’, train drivers acting professionally and by employing robust competency management and assurance programs.

4. **Principles**

4.1 Notwithstanding any specific definitions of speeds to be applied (which may be lower than those detailed) by any companies specific risk assessment the following ‘maximum’ speeds should be applied within T3 Engineering Possessions:

   a) Make the movement at caution

   b) Not exceed 25 mph (40 km/h) at any point in the journey when entering, making a movement within, or leaving the possession unless you are given specific instructions to travel at a lower speed

   c) Make any movement in a work site at no greater than 5 mph (10 km/h) unless you are given specific instructions by the ES or SWL on the maximum speed to be applied, but must be no greater than 15 mph (25 km/h)
5. **Risk Assessment**

5.1 The generic risk assessment (appendix C) associated with defining the speeds as detailed in 3 above, takes account all of the following control measures implemented by OTM suppliers and these include:

   a) Train driver training, with a specific bias to the rules etc. associated with T3 Engineering Possessions

   b) The development, implementation and monitoring of ‘Professional Driving Policies’ paying particular attention to the requirement for making movements at caution while travelling within a possession of the running line for engineering work T3.

   c) The various engineering and braking characteristics of machine types.

   d) Practical T3 assessments as part of the driver’s ongoing assessment cycle.

   e) On-going OTMR monitoring of speeds within T3.

   f) Collaboration – lessons learnt via M&EE operations group.

6. **Interface with Network Rail and Other Organisations**

6.1 Railway Undertakings and Network Rail have a duty to work closely together and co-operate over all aspects and as such need to learn from past events and is the best way to learn for the future and continuously improve. Reviews of major engineering incidents relating to the M & EE should be defined when/how a review takes place as part of the M&EE Networking Group.
Appendix A  Professional Driving Key Principles

Being a professional OTM driver and applying professional techniques are summarised by the following five key principles:

a) Having the right attitude and acting professionally at all times.
b) You are responsible for presenting yourself fit for duty, taking account of lifestyle, fatigue and any other external issues. Additional support is available via your manager or individual company counselling support company.
c) Maintaining a professional working environment and controlling distractions.
d) Consistently applying safe working and professional driving techniques in all situations.
e) Remembering: ‘If you can’t do it safely – don’t do it at all’.

Supporting instructions on how to meet the five key principles should be provided within the companies own organisations for whom its content is relevant.

Further guidance can be found with the Railway Duty Holders who are required under The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) 1 to make provisions within their Safety Management System (SMS) to ensure, so far as is reasonably practicable, that the competence of all safety-critical staff under their control is developed and maintained to a minimum safe standard.

Techniques to avoid excess speed and collisions within possession

Always travel at a safe, reduced speed based on:

a) The OTM braking capability and the distance ahead which you can see is clear, allowing for:
   i. darkness, fog or falling snow
   ii. curvature of the line
   iii. anything else affecting your view.

Give consideration to factors such as low adhesion conditions and the nature of the degraded operations which apply within the engineering possession, for example:

a) Signals: Don’t be misled by any signals displaying a proceed or caution aspect, as the line ahead could be occupied. Always ensure you have the correct authorisation before passing any signal at danger within an T3.
b) Points: Approach at caution any points, swing nose crossings and switch diamonds and make sure, if possible, they are in the correct position. You must not pass over these points or crossings at more than 15 mph.
c) Level crossings: You must carry out the instructions that you are given about passing over a level crossing.
d) Speed Restrictions: All permanent, temporary and emergency speed restrictions for the line still apply when travelling in the wrong direction. Remember you will generally approach these without any warning or signs to indicate the commencement of the restriction.
e) Other trains/vehicles and obstructions: You may encounter other trains, vehicle movements, propelling of vehicles and also obstructions on the line, particularly in worksites.
f) Persons working on the track: Whilst controls are in place to protect the persons working on the track, you still need to be very alert and expect the unexpected.
Appendix B Professional Driving Key Principles

This document has been produced by the M&EE Networking Group, both to support and to work in conjunction with, the recently published RSSB Guidance “Proceeding at Caution”. Although the guidance makes reference to possessions, the M&EE Operations Group wish to underline this by focusing on the difference between being verbally instructed to proceed at caution, and being required to proceed at caution without being specifically instructed.

Under normal signalling, drivers drive their train according to the meaning of the signal aspects and indications displayed. When verbally instructed to proceed at caution (e.g.; because of trespassers/animals on the line, infrastructure failures (track/signalling), failed trains etc.) drivers are required to adjust their driving to enable them to stop safely if the line ahead is obstructed.

When it comes to making a movement within a possession, then this is the expected norm. Rule Book Module T3 section 9.6 applies to movements within possessions, and states that the driver must make the movement at caution.

It is important to remember that, although the authority to make the movement can be given to a driver by different people (e.g.; Signaller, PICOP, ES/SWL), the requirement to make the movement at caution still applies, even if it isn’t specifically stated.

The Rule Book Module TW1 refers:

**Rule Book Module TW1, section 25**

If instructed to proceed at caution, you must, as well as not exceeding any specified speed, proceed at a speed which takes account of conditions (such as the distance you can see to be clear), that will allow you to stop the train short of any train, vehicle or other obstruction, or the end of your movement authority.

What does this mean to drivers?

Drivers must, when making a movement within a possession, apply Rule Book Module, T3 section 9.6 and proceed at caution (as per Rule Book module TW1, section 25). When being authorised to move, the phrase “proceed at caution” might not be used as this always applies within possessions.

Providing all applicable Rules and instructions are applied, we can help remain incident free and keep ourselves and the workplace safe.

**Remember:**

The requirement to proceed at caution applies at all times when making a movement within a possession.

Further information

Please refer to RSSB proceeding at caution guidance. This can be obtained via your operations team or by visiting [www.opsweb.co.uk](http://www.opsweb.co.uk).
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<thead>
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<th>Activity</th>
<th>Hazard</th>
<th>Consequence</th>
<th>Pre Controls</th>
<th>Current control measures</th>
<th>Residual risk (post controls)</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>L  S Risk Ranking</td>
<td>Train driving roles are assessed against company train drivers Competence Management System (CMS) (Cab Ride &amp; OTDR). Elements and criteria of CMS cover tasks including obtaining, understanding and implementing instructions received.</td>
<td>1 4 4 Low</td>
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<tr>
<td>1</td>
<td>Train handling (practical driving technique)</td>
<td>Incorrect driving technique</td>
<td>• Personal Injury, • Incident, accident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>3 5 15 High</td>
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<td>2</td>
<td>Driving in hazardous conditions: IE: leaf fall and climatic seasons etc.</td>
<td></td>
<td>• Personal Injury • Incident, accident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>3 5 15 High</td>
<td>Train driving roles are constantly assessed against company train drivers Competence Management System (CMS). Elements and criteria of CMS cover practical handling to cover all scenarios.</td>
<td>1 4 4 Low</td>
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<td>3</td>
<td>Lapse in concentration or distractions causing poor driving.</td>
<td></td>
<td>• Personal Injury, • Incident, accident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>3 5 15 High</td>
<td>Train driving roles are assessed against company train drivers Competence Management System (CMS). Elements and criteria of CMS cover practical handling to cover all scenarios. Only authorised personnel allowed in the cab. Professional train driver’s policy. Company policy on numbers of personal allowed in driving cab at any time. Company mobile phone policy applies.</td>
<td>1 5 5 Low</td>
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<td>Ref</td>
<td>Activity</td>
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<td>Activity</td>
<td>Hazard</td>
<td>Consequence</td>
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<td>Current control measures</td>
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<td>6</td>
<td></td>
<td>Low Rail adhesion due to leaves on the line, wet rails, icy rails, oil contamination</td>
<td>• Personal Injury, • Incident, accident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>L 3 S 5 Risk 15 Ranking High</td>
<td>Train driving roles are constantly assessed against company train drivers Competence Management System (CMS). Elements and criteria of CMS cover practical handling to cover all scenarios. Professional train driver’s policy. Seasonal briefs delivered to drivers by company and other railway source, i.e. RSSB (Opsweb/Right Track/Red DVD) and Network Rail.</td>
<td>L 1 S 4 Risk 4 Ranking Low</td>
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<tr>
<td>7</td>
<td></td>
<td>Collisions between trains inside possession (including OTP) HET-03-pos</td>
<td>Personal injury or death Damage to infrastructure/sidings damage to passing traffic. Damage to Train</td>
<td>L 2 S 5 Risk 10 Ranking Medium</td>
<td>Train driving roles are assessed against company train drivers Competence Management System (CMS). Emergency communications methods using train radio systems. Professional train driver’s policy. Application of associated rules. Possession Management staff PICOP/ES/SWL.</td>
<td>L 1 S 5 Risk 5 Ranking Low</td>
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<td>Ref</td>
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<td>8</td>
<td>Train striking object inside possession (not resulting in derailment) (HET-04-pos)</td>
<td>Personal injury or death Damage to infrastructure/sidings damage to passing traffic. Damage to Train</td>
<td>3 4 12 Medium</td>
<td>Train driving roles are constantly assessed against company train drivers Competence Management System (CMS). Emergency communications methods using train radio systems. Professional train driver’s policy. Application of associated rules. Possession Management staff PICOP/ES/SWL.</td>
<td>1 4 4 Low</td>
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<tr>
<td>9</td>
<td>Train striking buffer stop: inside possession (HET-09-pos)</td>
<td>Personal injury or death Damage to infrastructure/sidings damage to passing traffic. Damage to Train</td>
<td>1 4 4 Low</td>
<td>Train driving roles are constantly assessed against company train drivers Competence Management System (CMS). Emergency communications methods using train radio systems. Professional train driver’s policy. Application of associated rules. Possession Management staff PICOP/ES/SWL.</td>
<td>1 4 4 Low</td>
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<tr>
<td>10</td>
<td>Train Driving associated with possessions</td>
<td>Miscommunication with Signaller/Picop/ES/SWL</td>
<td>• Personal Injury, • Accident, incident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>3 4 12 Medium</td>
<td>Drivers CMS Drivers subject to unobtrusive monitoring. Drivers Rule Book knowledge. Communications training course. Communications Review Groups. M&amp;EE possession management aid memoir.</td>
<td>1 4 4 Low</td>
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<td>Ref</td>
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<td>11</td>
<td>Miscomm</td>
<td>Miscommunication with person in charge of movement</td>
<td>• Personal Injury, • Incident, accident, • SPAD or Derailment, • Injury/ fatality to members of the public/staff, • Infrastructure damage.</td>
<td>3 4 12 Medium</td>
<td>Drivers CMS Drivers subject to unobtrusive monitoring, Drivers Rule Book knowledge. Communications training course. Communications Review Groups. M&amp;EE possession management aid memoir.</td>
<td>1 5 5 Low</td>
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<tr>
<td>12</td>
<td>Exiting</td>
<td>Exiting possessions (missing or incorrectly placed possession PLB)</td>
<td>• Possession irregularity, • Incident, accident, • SPAD or Derailment, • Injury/ fatality to staff, • Infrastructure damage.</td>
<td>2 4 8 Medium</td>
<td>Drivers CMS Drivers subject to unobtrusive monitoring, Drivers Rule Book knowledge. M&amp;EE possession management aid memo. Correctly planned agreed exit points, with compliance. Use of correct communication protocol with ES/PICOP/SWL. Adherence to WONs/PONs and Signaller/ES (SWL)/PICOP instructions. Site specific briefings</td>
<td>1 4 4 Low</td>
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<td>Ref</td>
<td>Activity</td>
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<td>Consequence</td>
<td>Pre Controls</td>
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<td>S</td>
<td>Risk</td>
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<td>13</td>
<td>Collision with another rail vehicle due to driver not travelling at an appropriate speed.</td>
<td>Collision with another rail vehicle due to driver not travelling at an appropriate speed.</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>Medium</td>
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<td></td>
<td></td>
<td></td>
<td>Personal Injury to in-possession staff, rail incident/accident, SPAD or Derailment. Injury to members of the public, infrastructure damage.</td>
<td></td>
<td>Drivers CMS Drivers subject to unobtrusive monitoring, Drivers Rule Book knowledge. Use of correct communication protocol with ES/PICOP/COSS. Adherence to rules and Signaller/ES/SWL/PICOP/COSS instructions.</td>
<td>1</td>
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<tr>
<td>14</td>
<td>Late amendment to possession limits</td>
<td>Late amendment to possession limits</td>
<td>• Possession irregularity, • Incident, accident, • Low ranked SPAD or Derailment, • Injury/ fatality to staff, • Infrastructure damage.</td>
<td>4</td>
<td>4</td>
<td>16</td>
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<td></td>
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<td>Driver issued WON PON Work pack, SSOW in accordance with company’s safety Management System (SMS) • Driver booking on for duty fitness requirements procedures; • Distribution of operating notices; • Distribution of late notices; • Communication of urgent operating notices.</td>
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<td>1</td>
<td>4</td>
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