



No **COP0027** M&EE Networking Group Code of Practice for  
Issue 3 OTP Recovery  
Date Oct 17  
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## Document revision history

Issue	Date	Reason for change
1	Jul 2012	First issue (now withdrawn)
2	Nov 2014	Mention of POL removed and recommended actions improved.
3	Oct 2017	Periodic review of document undertaken

## Background

A sub-group of the M&EE Networking Group have looked at the processes necessary for the recovery of failed OTP on the railway line. 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 15 November 2017 and published on 3 November 2017

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## Purpose

This Code of Practice details the processes required for the recovery of failed OTP from the infrastructure.

## Scope

This Code of Practice is applicable to all types of OTP that requires recovery from the rail infrastructure.

## Definitions

<b>OTP</b>	On-track plant, vehicles with rail wheels capable of running on railway track, limited by their engineering acceptance to running within a possession only. These are split into three main groups: demountable machines, road rail vehicles (RRVs) and trailers.
<b>Plant operations provider</b>	The company or organisation approved to carry out plant operations on the railway infrastructure.

## 1. Options of Recovery

### 1.1. Assessment of failed OTP

- 1.1.1. Immediately after the OTP has failed, the vicinity of the site of failure should be made safe. Appropriate measures should be taken to bring the OTP to a safe condition including stability and to secure any attached load or trailer to prevent unexpected movement. The measures needed to bring the OTP to a safe condition will depend on the nature and circumstances of the failure. Precautions must be taken to ensure that people are not exposed to risk while the OTP is being secured. Specific consideration should be given for the potential of any other train movements in the immediate vicinity and appropriate protection measures implemented.
- 1.1.2. The plant operations provider's representative on site should escalate the failure through their on-call system. Where the site is under the control of a separate company then their representative should also be advised, and involved in the process.
- 1.1.3. A review of the safe system of work should be undertaken to determine whether it is still suitable to carry out the recovery process. Any amendments required should be made before any further work or assessment is undertaken and permission sought where required in accordance with the infrastructure manager's instructions.
- 1.1.4. An initial assessment of the OTP should be undertaken by the operator to determine what has failed and whether it can be repaired in an acceptable timescale. Where the initial assessment identifies a need for a more comprehensive assessment, the operator should consult with his supervisor to request support from a trained and competent technician/engineer/maintainer. Consideration should also be given as to whether testing will be required after repair and before the OTP can be moved or returned to service.
- 1.1.5. Should the assessment carried out in 1.1.4 conclude that the OTP is beyond repair in an acceptable timescale, further assessment should consider whether it is possible to safely remove the failed OTP from the infrastructure, or move/tow the OTP to a more suitable location (eg. a stabling point, access point or lineside). The assessment should include consideration of at least the following:
  - Security of the OTP and any systems that might foul the adjacent line and implement appropriate protection arrangements where applicable. This should include consideration of any other vehicles, equipment, infrastructure assets or personnel.

- Reference to the OTP manufacturer's emergency recovery instructions and any contingency plans (or emergency preparedness plans).
  - Site based hazards such as gradients, weather, visibility, track geometry, proximity hazards, distance, adhesion conditions etc.
  - Risks associated with degraded systems (eg. defective brakes etc.)
  - The lineside ground condition for suitability at the off-tracking location and the location where the failed OTP is to be left.
  - Access for any future repairs or recovery from where the failed OTP has been left.
  - The need for exclusion zones around both the OTP and towing connections.
  - The availability and capability of other vehicles that may be able to assist. Ref 1.3.2
  - Ensure the line to be used is clear all the way to the off-tracking point including correct setting of points.
  - Methods of communication during the recovery operation.
  - Stability of the OTP.
- 1.1.6. An assessment should be made of which parts of the OTP are out of gauge and which items can be brought back into gauge with the auxiliary power if provided, or other manual assistance. If the OTP cannot be brought back into gauge, the assessment needs to consider the route to be taken to confirm that the OTP can be transited safely.
- 1.1.7. The orientation of the OTP needs to be assessed as it may affect how it can be recovered (e.g. boom mounted MEWPs could prevent the fitment of a tow bar if the boom was towards the recovery vehicle). Consideration could be given to alternative methods of recovery if the orientation of the OTP prevents towing or propelling.
- 1.1.8. Should the brakes need to be isolated, this should only be carried out after the OTP has been positively coupled to the rescue vehicle. The rescue vehicle should have the capability to control the movement of the failed unbraked OTP. The OTP should immediately be made safe after the recovery process.

*Note: Isolation of brakes should only be considered as a last resort.*

- 1.1.9. Consideration should be given to ensuring the capability of the tow bar and the connection method if conducting an unbraked move with OTP. Consideration should also be given to any additional operational procedures that could be implemented to mitigate the potential for a break-away.
- 1.1.10. The security of component assemblies that could go out of gauge whilst being moved need to be considered.
- 1.1.11. If the recovery of OTP is going to be via a vehicle not under the same plant operations provider, then consideration and agreement should be given to who oversees the recovery process.
- 1.1.12. There is a possibility that the failed machine is not on the approved suppliers list of the company overseeing the recovery. The recovery plan agreed at the time should cover this scenario.
- 1.1.13. A process should be agreed before any movement takes place to check that any damage that could be caused to the infrastructure is identified.

## **1.2. Removing from the line**

- 1.2.1. Where possible the OTP should use its own auxiliary systems to bring itself into gauge and drive to the on and off tracking point.
- 1.2.2. Where the auxiliary system does not include the traction system it may be possible to bring it back into gauge and use another vehicle or manual force to move along the track.
- 1.2.3. If the failed OTP is leaking oil or fluids the leakage should be stopped before the OTP is moved. Any residual oil / fluids should be removed from the running rails and, as far as possible, from the track bed. Spill kits should be deployed to mitigate unwanted contamination of ground and water courses.
- 1.2.4. It could be necessary to use lifting equipment to lift the failed vehicle from the line. A lift plan will be required before any lifting activity takes place.

## **1.3. Towed by Traction unit / OTP / road vehicle**

- 1.3.1. The emergency tow bar needs to be checked to see what type of vehicle it will fit to. The length of the tow bar will need to be considered depending on the orientation of the failed vehicle.
- 1.3.2. Where a suitable tow bar is not available or unable to be fitted, the use of suitable ropes / chains could be used as a last resort. Consideration should be given to track features such as gradients and mitigation provided against the risk of runaway or collision into the

towing vehicle. When selecting equipment to be used for towing or propelling consideration should be given to the following points:

- Gross weight of the vehicle being towed or propelled.
- Likely resistance to being towed or propelled (seized brakes, locked transmission etc).
- Poor track adhesion conditions.
- Gradient/incline on rail or off rail.
- If certified lifting equipment is used then it should be taken out of use after the towing operation, quarantined, and subject to a thorough examination, in accordance with LOLER, prior to re-use.
- There should be an exclusion zone of at least the length of the consist.