#### **B - Competence Standards (Host Machines)**

Competence Standards applicable to the work activities associated with the operation of OTP have been developed and are contained within this appendix.

#### **B.1 Competence Framework**

Based on an industry & functional analysis the following Competence Standards have been identified as suitable to control risks associated with competent performance of people who are operating OTP on Network Rail Managed Infrastructure.

#### **B.1.1 Operators of OTP Category**

Relevant to all people operating On Track Plant on Network Rail Managed Infrastructure.

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OTP Crane Op Exc - Crane Operator - Excavator Crane
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OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting

OTP Op Dozer - Machine Operator - Crawler/Tractor Dozer

OTP Op Exc - Machine Operator - Excavator

OTP Op Dump T - Machine Operator - Dump Truck

OTP Op Dumper - Machine Operator - Dumper

OTP Op Motor Trolley - Machine Operator - Motorised Trolley

OTP Op MEWP - Machine Operator - Self Propelled MEWP

OTP Op B Packer - Machine Operator - Ballast Packer

OTP Op Gopher - Machine Operator - Trac Gopher

OTP Op Clipper - Machine Operator - Clipper

OTP Op HPV - Machine Operator - Highway Permissible Vehicle

OTP Crane Op - Crane Operator - Lorry Loader Crane

OTP Op MEWP Att - Machine Operator - MEWP Attachment

OTP Op Mini Tamper - Machine Operator - Mini Tamper

OTP Op Sleeper Changer – Machine Operator – Sleeper Changer (only exists on the Framework)

# **B.2 Evidence Requirements**

Sufficient evidence must be collected to enable competence to be assessed against all the performance statements and knowledge and understanding requirements for each element. Evidence must be sufficient to confirm that the person is capable of consistent competent performance.

#### **B.2.1 Performance Evidence**

The standards of competence in the appendices specify the various forms and quantities of performance evidence which are required for each element.

There are two types of performance evidence:

- a) Evidence of the way the person carried out activities evidence of the process involved in demonstrating competence. This takes the form of observation, authenticated logbook entries, or performance reports.
- b) Products of the person's work items that the person produces or works on, or documents produced as part of that activity. The evidence may be in the form of the product itself or may be records or photographs generated as part of the work.

#### **B.2.2 Knowledge Evidence**

The knowledge evidence section of the element specifies the knowledge and understanding necessary for competent performance. Adherence to the training & competence assessment frameworks will confirm the appropriate content from the following knowledge requirements are trained and assessed at regular intervals.

#### B.2.3 Knowledge requirements that are common to all Competence Standards

Candidates must have knowledge and understanding of:

Health and safety legislation, regulations and safe working practices and procedures that must include the relevant sections of the following:

- · Health and Safety at Work Act
- Provision and Use of Work Equipment Regulations 1998
- Lifting Operations & Lifting Equipment Regulations
- Railways and Other Guided Transport Systems (Safety) Regulation
- COSHH
- Transport and Works Act (Alcohol and Drugs)
- Track Access Restrictions (as stated Engineering Conformance Certificate)
- GE/RT8000
- Machine Site Arrival Checks NR/L3/OPS/047/TMC08
- GH/RT/4004 Working Time Directive (ERG/03)

#### **B.2.4 Assessment Decisions**

Initial assessment decisions shall only be made following the generation of evidence from the person's normal workplace. Assessment decisions of 'competent' shall only be made when:

- All the required performance and knowledge evidence, as defined in the competence standard, has been provided.
- The evidence has been confirmed as accurate, current, and attributable to the person concerned.
- Endorsements and attachments to the OTP category can (where specified) be added to a competence certificate following successful completion of training.

#### **OTP Crane Op Exc: Crane Operator - Excavator Crane**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate an Excavator Crane.

# 2. Scope

This competence standard applies in all circumstances where any person is required to operate the excavator as an excavator crane within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the excavator crane on Network Rail Managed Infrastructure.

# 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Road Rail Excavator Crane safely.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also be assessed as competent in units of competence OTP Crane Op Exc: Crane Operator - Excavator Crane and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating an excavator crane.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 6.3.

### 5. Knowledge Evidence common to the whole unit

#### You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. The compatibility of host machine, equipment, and attachments.
- 10. Safe start up procedures, including checks prior to operational controls test.
- 11. The machine lift duty charts and the limitations for the intended lift
- 12. When the machine horn should be sounded
- 13. Work procedures and hazards when adjacent lines are open to traffic.
- 14. What authorisation procedures are and limits of your responsibility and authority.
- 15. What procedures apply to taking the equipment out of operational service.
- 16. Types of hazards, lines, and methods of communication during emergency recovery.

#### **OTP Crane Op Exc: Crane Operator - Excavator Crane**

#### Element 1: Carry out pre-work checks.

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Follow the relevant machine safety and pre-work checks in accordance with instructions.
- c. Confirm the host machine can operate with lifting equipment or quick hitch.
- d. Confirm the documentation which is required with the machine.
- e. Confirm that the machine meets the required operating specification and assess the condition.
- f. Carry out the maintenance activities within the limits of the prework checks.
- g. Identify and report any instances where the required specification cannot be fully met or where there are identified defects.
- h. Complete relevant pre-work check

- a. What the PPE requirements of an operator are
- What operator documentation is required prior to and on completion of work.
- c. Type and proximity of hazard including signal gantries, structures, lineside fixtures, lines open to traffic, other vehicles, and ground personnel.
- d. The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode.
- e. What type of defects can occur and how to check for these, including brake systems and horn.
- f. What tests/checks must be undertaken for a complete pre-work check, including: fluids, lighting, horn, brakes, road & rail wheels, motion restriction systems, equipment & attachments are

- records accurately and pass them to the appropriate person.
- Dispose of waste material in accordance with safe working practices and approved procedures.
- correctly attached to host machine, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.
- g. Health & safety features, including spillage control and fire prevention.
- Safe start up procedures, including checks made prior to operational controls test.
- Limits of the operator competence

### Scope of Competence

- Safety and pre-work checks will include:
  - Visual checks
  - Identify any faults that may affect the safety of the machine.
  - Check fluid levels including hydraulic, engine, fuel, coolant, screen wash etc.
  - Rail wheels including 'flange' damage, 'flat spots or 'play' in rail wheel bearings.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check for correct function of lights, including rail navigation lights and brake light isolation.
  - Check the operation of the horn.
  - Check all operational controls are functioning correctly.
  - Test motion restriction systems e.g., height and slew limiters.
  - Test all braking systems in road mode.
  - Check compatibility of machine, equipment & attachments.
  - Check required documentation and confirm it is current.
  - Check method statement contains machine type, equipment & attachments including quick hitches.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Confirm body panels, hatches or inspection covers are replaced and secure following checks.
  - Check machine logbook entries and record results of checks and identified defects.

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d, e, and g for all applicable items in scope statement 1.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

OTP Crane Op Exc: Crane Operator - Excavator Crane	
Element 2: On and off tracking	
Performance Statements	Knowledge statements

You must be able to:

You must have knowledge and

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point confirm suitability, size of route and proximity hazards.
- c. Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- d. Confirm that on and off tracking points are approved and fit for purpose.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale, using horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

#### understanding of:

- Types of hazards associated with movement of the machine to the ontracking point including:
  - Pedestrians / ground personnel / vehicles / man- hole inspection covers / buildings / cable routes/ materials etc.
- b. Types of hazards associated with the on/off- tracking point including:
  - Signal gantries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc. including when it is safe to inspect the site.
- c. Lines and methods of communication, including:
  - Situations where access route is found to be unacceptable.
  - Personnel responsible for the preplanned safe system
  - Safe system of work (including documentation) which must be in place prior to entering the access point.
  - Types of hazards associated with adjacent lines when open to traffic.
  - Procedure to follow prior to carrying out machine movements.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/offtracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on-track the machine.
  - Confirm that the machine is in the correct configuration for travel including, in gauge and steering locks applied etc.
  - Safely off-track the machine
- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or

#### Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'e' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

timber.

 Other approved on tracking system

#### **OTP Crane Op Exc: Crane Operator - Excavator Crane**

#### Element 3: Operate the Road Rail Excavator safely

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Confirm that buried services procedures are undertaken prior to operating the machine.
- d. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- Report any instances where lifting requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

# **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line.
- Lines and methods of communication, including:
  - Situations where access or travel route in road or rail mode is found to be unacceptable.
  - Personnel responsible for buried services check and method of confirming, approval to begin excavations.
- c. Method of protection (including documentation) which must be in place prior to commencing excavations.
- d. Operating & manufacturer's requirements & instructions applicable to the safe use of host machine, equipment & attachments.
- e. Method for confirming compatibility of the lifting accessory or quick hitch with the lifting equipment.
- f. Able to differentiate between quick hitches as a lifting accessory &/or lifting equipment.
  - Approved method of using quick hitches or lifting accessories.
- g. Work procedures and hazards associated with adjacent lines, where open to traffic.
- h. Safe loading and unloading of rail wagons.
- The likely impact of your work on the operations of other departments and the impact of their work for you.
- j. Regulations, guidelines, and operating procedures for; motion restriction systems; offset booms; effects of cant on machine stability & buried services.

#### **Scope of Competence**

- 1. Operating activities are to:
  - Select & correctly attach approved lifting attachments.
  - Correctly set the Rated Capacity Indicator, (RCI) for lifting duties, where fitted.
  - Confirm machine remains stable at all times through correct machine movement, use of RCI,

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

- axle stabilisers and machine controls.
- Minimise contact with the vehicle being loaded / unloaded, confirming an even load distribution throughout.
- Complete work to required lift plan including load stability and use of taglines.
- Confirm communication is maintained with relevant personnel, communication is:
  - i. Verbal (Duplex Comms)
  - ii. Hand signals

#### 2. Operating procedures are to:

- Set & test the RCI equipment including motion restriction systems.
- Confirm the whereabouts of obstructions, cables, or other overhead services prior to lifting.
- Identify restricted zones & protection arrangements.
- Work adjacent to lines open to rail movements, including when trains approach.
- Work in accordance with manufacturer's instructions for host machine, lifting accessories and RCI's.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

#### OTP Crane Op Exc: Crane Operator - Excavator Crane

#### **Element 4: Emergency Procedures**

#### Performance Statements

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency activities cannot be fully met.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Auxiliary systems, including release of
- d. Towing vehicle, including certification requirements and maximum allowable towing weight.
- e. Method approved to connect the towing machine to the failed machine.
- f. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- g. Duties of the operator when the failed vehicle brakes are still operational.
- h. Checks to be made of a machine that has been de-railed before it is rerailed and the competence requirements to carry out the checks

#### **Scope of Competence**

#### **Performance Evidence Requirements**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
- 2. For the failed machine, confirm that by use of the auxiliary system the machine:
  - Is in gauge.
  - · Has the slew lock applied.
  - Boom and dipper-arm remain below cab.
  - Axle stabilisers are in the unlocked position.
- 3. Procedure in the event of an incident or accident including:
  - Accident/incident reporting
  - Checks of a de-railed machine
  - Requirements to be met before rerailing a derailed machine.

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

#### OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate an Excavator Crane.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the excavator as an excavator crane within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the excavator crane on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Road Rail Excavator Crane safely.

#### Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also be assessed as competent in units of competence OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating an Excavator Crane.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 6.3.

#### 5. Knowledge Evidence common to the whole unit

#### You must have knowledge and understanding of:

- 17. What equipment certification / documentation is required.
- 18. Procedures to confirm operational and personal safety is maintained during the work.
- 19. How movement & operation of OTP may affect the safe operation of the railway.
- 20. The operating and care and control procedures applicable.
- 21. Reporting lines, communication protocols and procedures.
- 22. How the systems function under normal operating conditions.
- 23. What each of the component parts contributes to the operation of the OTP.
- 24. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 25. The compatibility of host machine, equipment, and attachments.
- 26. Safe start up procedures, including checks prior to operational controls test.
- 27. The machine lift duty charts and the limitations for the intended lift
- 28. When the machine horn should be sounded
- 29. Work procedures and hazards when adjacent lines are open to traffic.
- 30. What authorisation procedures are and limits of your responsibility and authority.
- 31. What procedures apply to taking the equipment out of operational service.
- 32. Types of hazards, lines, and methods of communication during emergency recovery.

#### **OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting**

### Element 1: Carry out pre-work checks.

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Follow the relevant machine safety and pre-work checks in accordance with instructions.
- c. Confirm the host machine can operate with lifting equipment or quick hitch.
- d. Confirm the documentation which is required with the machine.
- e. Confirm that the machine meets the

- a. What the PPE requirements of an operator are
- What operator documentation is required prior to and on completion of work.
- c. Type and proximity of hazard including signal gantries, structures, lineside fixtures, lines open to traffic, other vehicles, and ground personnel.
- d. The purpose of rail navigation lights, and why road lights and amber flashing

- required operating specification and assess the condition.
- f. Carry out the maintenance activities within the limits of the prework checks.
- g. Identify and report any instances where the required specification cannot be fully met or where there are identified defects.
- h. Complete relevant pre-work check records accurately and pass them to the appropriate person.
- Dispose of waste material in accordance with safe working practices and approved procedures.

- beacons are required to be turned off when in rail mode.
- e. What type of defects can occur and how to check for these, including brake systems and horn.
- f. What tests/checks must be undertaken for a complete pre-work check, including: fluids, lighting, horn, brakes, road & rail wheels, motion restriction systems, equipment & attachments are correctly attached to host machine, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.
- g. Health & safety features, including spillage control and fire prevention.
- Safe start up procedures, including checks made prior to operational controls test.
- i. Limits of the operator competence

# **Scope of Competence**

- 2. Safety and pre-work checks will include:
  - Visual checks
  - Identify any faults that may affect the safety of the machine.
  - Check fluid levels including hydraulic, engine, fuel, coolant, screen wash etc.
  - Rail wheels including 'flange' damage, 'flat spots or 'play' in rail wheel bearings.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check for correct function of lights, including rail navigation lights and brake light isolation.
  - Check the operation of the horn.
  - Check all operational controls are functioning correctly.
  - Test motion restriction systems e.g., height and slew limiters.
  - Test all braking systems in road mode.
  - Check compatibility of machine, equipment & attachments.
  - Check required documentation and confirm it is current.
  - Check method statement contains machine type, equipment & attachments including quick hitches.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Confirm body panels, hatches or inspection covers are replaced and secure following checks.

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d, e, and g for all applicable items in scope statement 1.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

 Check machine logbook entries and record results of checks and identified defects.

# OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting

### Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point confirm suitability, size of route and proximity hazards.
- Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- d. Confirm that on and off tracking points are approved and fit for purpose.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale, using horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

### **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the ontracking point including:
  - Pedestrians / ground personnel / vehicles / man- hole inspection covers / buildings / cable routes/ materials etc.
- b. Types of hazards associated with the on/off- tracking point including:
  - Signal gantries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc. including when it is safe to inspect the site.
- c. Lines and methods of communication, including:
  - Situations where access route is found to be unacceptable.
  - Personnel responsible for the preplanned safe system
  - Safe system of work (including documentation) which must be in place prior to entering the access point.
  - Types of hazards associated with adjacent lines when open to traffic.
  - Procedure to follow prior to carrying out machine movements.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/offtracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on-track the machine.

#### Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'e' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial

- Confirm that the machine is in the correct configuration for travel including, in gauge and steering locks applied etc.
- Safely off-track the machine
- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# **OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting**

# Element 3: Operate the Road Rail Excavator safely

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Confirm that buried services procedures are undertaken prior to operating the machine.
- d. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- e. Report any instances where excavation requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

### **Knowledge statements**

- Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line.
- b. Lines and methods of communication, including:
  - Situations where access or travel route in road or rail mode is found to be unacceptable.
  - Personnel responsible for buried services check and method of confirming, approval to begin excavations.
- Method of protection (including documentation) which must be in place prior to commencing excavations.
- d. Operating & manufacturer's requirements & instructions applicable to the safe use of host machine, equipment & attachments.
- e. Method for confirming compatibility of the lifting accessory or quick hitch with the lifting equipment.
- f. Able to differentiate between quick hitches as a lifting accessory &/or lifting equipment.
  - Approved method of using quick hitches or lifting accessories.
- g. Types of buckets required for the task.
- h. Work procedures and hazards associated with adjacent lines, where open to traffic.
- i. Safe loading and unloading of rail wagons.
- j. The likely impact of your work on the operations of other departments and the impact of their work for you.
- k. Regulations, guidelines, and operating procedures for; motion restriction

# systems; offset booms; effects of cant on machine stability & buried services.

#### **Scope of Competence**

- 1. Operating activities are to:
  - Select & correctly attach approved bucket(s)
  - Correctly set the Rated Capacity Indicator, (RCI) for excavating duties, where fitted.
  - Install/remove a quick hitch device.
    - i.Confirm correct attachment to host machine.
    - ii.Confirm retaining bar and/or safety locking bar is correctly located.
  - Confirm machine remains stable at all times through correct machine movement, use of RCI, axle stabilisers and machine controls.
  - Minimise contact with the vehicle being loaded / unloaded, confirming an even load distribution throughout.
  - Complete work to required tolerances including excavation, reinstatement, and levelling.
  - Confirm communication is maintained with relevant personnel, communication is:
    - iii. Verbal
    - iv. Hand signals
- 2. Operating procedures are to:
  - Set & test the RCI equipment including motion restriction systems.
  - Confirm the whereabouts of obstructions, cables, or other underground services prior to excavating.
  - Identify restricted zones & protection arrangements.
  - Work adjacent to lines open to rail movements, including when trains approach.
  - Work in accordance with manufacturer's instructions for host machine, lifting accessories and quick hitches

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Crane Op TL - Crane Operator Excavator Crane Tandem Lifting

# **Element 4: Emergency Procedures**

# **Performance Statements**

You must be able to:

#### Work safely at all times, complying with health and safety and other relevant

#### Knowledge statements

You must have knowledge and understanding of:

a. Types of hazards associated with

- regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency activities cannot be fully met.

- emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Auxiliary systems, including release of brakes.
- d. Towing vehicle, including certification requirements and maximum allowable towing weight.
- e. Method approved to connect the towing machine to the failed machine.
- Maximum speed at which towing vehicle may travel whilst towing failed machine.
- g. Duties of the operator when the failed vehicle brakes are still operational.
- h. Checks to be made of a machine that has been de-railed before it is rerailed and the competence requirements to carry out the checks

#### **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
- 2. For the failed machine, confirm that by use of the auxiliary system the machine:
  - Is in gauge.
  - Has the slew lock applied.
  - Boom and dipper-arm remain below cab.
  - Axle stabilisers are in the unlocked position.
- 3. Procedure in the event of an incident or accident including:
  - Accident/incident reporting
  - Checks of a de-railed machine
  - Requirements to be met before rerailing a derailed machine.

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

The purpose of this competence standard is to define the competence requirements for persons required to operate Crawler / Tractor Dozer.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Crawler / Tractor Dozer & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Crawler / Tractor Dozer on Network Rail Managed Infrastructure.

# 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Crawler / Tractor Dozer safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Crawler / Tractor Dozer.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 6.3.

#### 5. Knowledge Evidence common to the whole unit

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.

- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

#### OTP Op Dozer - Machine Operator - Crawler/Tractor Dozer

#### Element 1: Carry out pre-work checks.

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm the documentation which is required with the machine.
- d. Confirm that the machine meets the required operating specification and assess the condition.
- e. Carry out the maintenance activities within the limits of the pre-work check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant pre-work check records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe working practices and approved procedures.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. What the PPE requirements of an operator are.
- What operator documentation is required prior to and on completion of the work.
- c. Type and proximity of hazards including: signal gantries, structures, line side fixtures, lines open to traffic, other vehicles, and ground personnel.
- d. The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode.
- e. What types of defects can occur and how to check for these defects.
- f. What to do in the event of faults to the:
  - braking system
  - horn.
- g. What tests/checks must be undertaken for a complete pre-work check:

Checks include: fluids, lighting, horn, brakes, caterpillar tracks, rail wheels, security of tow- bars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.

- h. Health & Safety features, including spillage control and fire prevention.
- Safe start up procedures, including checks made prior to operational controls test.
- Limits of the operator competence.

#### **Scope of Competence**

- 1. Safety and pre-work checks will include:
  - Identify any faults that may affect the safety of the machine operation.
  - Check fluid levels, including hydraulic, engine, fuel, coolant, screen wash etc.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check front bogie security and rail wheels.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check correct function of lights, including rail navigation lights.
  - Check the operation of the horn.
  - Check all operational controls are functioning correctly including: blade raise/lower, angle and tilt, steering
  - Test all braking systems in road mode and bogie rail wheel braking.
  - Check required documentation and confirm it is current.

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d and e.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a

- Check safety & environmental features including spill kits and fire extinguishers.
- Confirm body panels, hatches or inspection covers are replaced and secure following checks.
- Check machine logbook entries and record results of checks and defects.

combination of the above for the person completing all relevant operating procedures.

# OTP Op Dozer - Machine Operator - Crawler/Tractor Dozer

#### Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an On-Track brake test and confirm to relevant personnel.
- h. Confirm that the machine is in the correct configuration for travel following on tracking.

# Knowledge statements

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the ON tracking point including:
  - Pedestrians / ground personnel / vehicles / man-holes inspection covers / buildings / cable routes / materials/surfaces over which the machine will travel etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc. including when it is safe to inspect the site.
- c. Lines and methods of communication, including:
  - Situations where access route is found to be unacceptable.
  - Personnel responsible for the pre-planned safe system.
  - What to do if you lose sight of the Machine Controller.
- Safe system of work (including documentation) which must be in place prior to on tracking.
- e. Types of hazards associated with adjacent lines open to traffic, when operating or on/off tracking.
- f. Procedure to follow prior to carrying out machine movements.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on-track the machine.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e g and h.

Performance statement 'b, c, d and f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or

- Safely off-track the machine
- 2. On/off-tracking procedures include preventing damage to the rail head by the machine tracks and access via:
  - Level crossing
  - · Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Op Dozer - Machine Operator - Crawler/Tractor Dozer

# Element 3: Operate the Road Rail Crawler / Tractor Dozer safely

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Confirm that buried services procedures are undertaken prior to operating the machine.
- d. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- e. Report any instances where excavation / reinstatement requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line.
- b. Lines and methods of communication, including:
  - Personnel responsible for buried services check and method of confirming, approval to begin excavations.
- c. Regulations, guidelines, and operating procedures in areas of buried services.
- d. Method of protection (including documentation) which must be in place prior to commencing excavations reinstatement.
- e. The likely impact of your work on the operations of other departments and the impact of their work for you

#### **Scope of Competence**

- 1. Operating activities are to:
  - Safely and correctly excavate the ground to the required levels confirming all windrows are removed.
  - Safely and correctly spread and reinstate material to the required levels confirming all windrows are removed.
  - Confirm the whereabouts of obstructions, cables or other underground services prior to excavating.
  - Identify restricted zones and comply with protection arrangements.
  - Work adjacent to the railway line or structure.

# **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a,b and d.

Performance statements 'c and e' may be assessed by using a range of assessment methods including witness testimony, documented questioning or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work

checks, knowledge testing or a combination
of the above for the person
completing all relevant operating
procedures.

# **OTP Op Dozer - Machine Operator - Crawler/Tractor Dozer**

#### **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency towing activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

#### Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- Auxiliary systems, including release of brakes.
- d. Towing vehicle, including certification requirements and maximum allowable towing weight.
- e. Method approved to connect the towing machine to the failed machine.
- f. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- g. Duties of the operator when the failed vehicle brakes are still operational.
- Checks to be made of a machine that has been de-railed before it is re-railed and the competence requirements to carry out the checks.

#### **Scope of Competence**

- a. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
- b. For the failed machine, confirm that the machine:
  - Is in gauge.
  - Emergency brake release system is operated.
- c. Procedure in the event of an incident or accident including;
  - · Accident/incident reporting
  - · Checks of a de-railed machine
  - Requirements to be met before re-railing a derailed machine.

# **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities

#### **OTP Op Exc - Machine Operator - Excavator**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate an Excavator.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to carry out excavations with an excavator within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the excavator on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Road Rail Excavator safely.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating an excavator.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 6.3.

#### 5. Knowledge Evidence common to the whole unit

- 33. What equipment certification / documentation is required.
- 34. Procedures to confirm operational and personal safety is maintained during the work.
- 35. How movement & operation of OTP may affect the safe operation of the railway.
- 36. The operating and care and control procedures applicable.
- 37. Reporting lines, communication protocols and procedures.
- 38. How the systems function under normal operating conditions.
- 39. What each of the component parts contributes to the operation of the OTP.
- 40. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 41. The compatibility of host machine, equipment, and attachments.

- 42. Safe start up procedures, including checks prior to operational controls test.
- 43. The machine lift duty charts and the limitations for the intended lift
- 44. When the machine horn should be sounded
- 45. Work procedures and hazards when adjacent lines are open to traffic.
- 46. What authorisation procedures are and limits of your responsibility and authority.
- 47. What procedures apply to taking the equipment out of operational service.
- 48. Types of hazards, lines, and methods of communication during emergency recovery.

### **OTP Crane Op Exc: Crane Operator - Excavator Crane**

#### Element 1: Carry out pre-work checks.

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Follow the relevant machine safety and pre-work checks in accordance with instructions.
- c. Confirm the host machine can operate with lifting equipment or quick hitch.
- d. Confirm the documentation which is required with the machine.
- e. Confirm that the machine meets the required operating specification and assess the condition.
- f. Carry out the maintenance activities within the limits of the prework checks.
- g. Identify and report any instances where the required specification cannot be fully met or where there are identified defects.
- h. Complete relevant pre-work check records accurately and pass them to the appropriate person.
- Dispose of waste material in accordance with safe working practices and approved procedures.

- a. What the PPE requirements of an operator are
- b. What operator documentation is required prior to and on completion of work.
- Type and proximity of hazard including signal gantries, structures, lineside fixtures, lines open to traffic, other vehicles, and ground personnel.
- d. The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode.
- e. What type of defects can occur and how to check for these, including brake systems and horn.
- f. What tests/checks must be undertaken for a complete pre-work check, including: fluids, lighting, horn, brakes, road & rail wheels, motion restriction systems, equipment & attachments are correctly attached to host machine, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.
- g. Health & safety features, including spillage control and fire prevention.
- Safe start up procedures, including checks made prior to operational controls test.
- i. Limits of the operator competence

#### **Scope of Competence**

- Safety and pre-work checks will include:
- Visual checks
- Identify any faults that may affect the safety of the machine.
- Check fluid levels including hydraulic, engine, fuel, coolant, screen wash etc.
- Rail wheels including 'flange' damage, 'flat spots or 'play' in rail wheel bearings.
- · Correctly start the machine

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d, e, and g for all applicable items in scope statement 1.

The remaining performance statements may be assessed by using

- confirming area is clear of personnel and obstructions.
- Check for correct function of lights, including rail navigation lights and brake light isolation.
- Check the operation of the horn.
- Check all operational controls are functioning correctly.
- Test motion restriction systems e.g., height and slew limiters.
- Test all braking systems in road mode.
- Check compatibility of machine, equipment & attachments.
- Check required documentation and confirm it is current.
- Check method statement contains machine type, equipment & attachments including quick hitches.
- Check safety & environmental features including spill kits and fire extinguishers.
- Confirm body panels, hatches or inspection covers are replaced and secure following checks.
- Check machine logbook entries and record results of checks and identified defects.

a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

# **OTP Crane Op Exc: Crane Operator - Excavator Crane**

#### Element 2: On and off tracking

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point confirm suitability, size of route and proximity hazards.
- Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- d. Confirm that on and off tracking points are approved and fit for purpose.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale, using horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

#### **Knowledge statements**

- Types of hazards associated with movement of the machine to the ontracking point including:
  - Pedestrians / ground personnel / vehicles / man- hole inspection covers / buildings / cable routes/ materials etc.
- b. Types of hazards associated with the on/off- tracking point including:
  - Signal gantries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc. including when it is safe to inspect the site.
- c. Lines and methods of communication, including:
  - Situations where access route is found to be unacceptable.
  - Personnel responsible for the preplanned safe system
  - Safe system of work (including documentation) which must be in

- place prior to entering the access point.
- Types of hazards associated with adjacent lines when open to traffic.
- Procedure to follow prior to carrying out machine movements.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/offtracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on-track the machine.
  - Confirm that the machine is in the correct configuration for travel including, in gauge and steering locks applied etc.
  - Safely off-track the machine
- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'e' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Crane Op Exc: Crane Operator - Excavator Crane

#### Element 3: Operate the Road Rail Excavator safely

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Confirm that buried services procedures are undertaken prior to operating the machine.
- d. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- e. Report any instances where

# **Knowledge statements**

- a. Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line.
- b. Lines and methods of communication, including:
  - Situations where access or travel route in road or rail mode is found to be unacceptable.
  - Personnel responsible for buried services check and method of confirming, approval to begin excavations.

excavation requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

- c. Method of protection (including documentation) which must be in place prior to commencing excavations.
- d. Operating & manufacturer's requirements & instructions applicable to the safe use of host machine, equipment & attachments.
- e. Method for confirming compatibility of the lifting accessory or quick hitch with the lifting equipment.
- f. Able to differentiate between quick hitches as a lifting accessory &/or lifting equipment.
  - Approved method of using quick hitches or lifting accessories.
- g. Types of buckets required for the task.
- h. Work procedures and hazards associated with adjacent lines, where open to traffic.
- i. Safe loading and unloading of rail wagons.
- The likely impact of your work on the operations of other departments and the impact of their work for you.
- k. Regulations, guidelines, and operating procedures for; motion restriction systems; offset booms; effects of cant on machine stability & buried services.

### **Scope of Competence**

- 1. Operating activities are to:
  - Select & correctly attach approved bucket(s)
  - Correctly set the Rated Capacity Indicator, (RCI) for excavating duties, where fitted.
  - Install/remove a quick hitch device
    - iii.Confirm correct attachment to host machine.
    - iv.Confirm retaining bar and/or safety locking bar is correctly located.
  - Confirm machine remains stable at all times through correct machine movement, use of RCI, axle stabilisers and machine controls.
  - Minimise contact with the vehicle being loaded / unloaded, confirming an even load distribution throughout.
  - Complete work to required tolerances including excavation, reinstatement, and levelling.
  - Confirm communication is maintained with relevant personnel, communication is:
    - v. Verbal
    - vi. Hand signals

# **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

- 2. Operating procedures are to:
  - Set & test the RCI equipment including motion restriction systems.
  - Confirm the whereabouts of obstructions, cables, or other underground services prior to excavating.
  - Identify restricted zones & protection arrangements.
  - Work adjacent to lines open to rail movements, including when trains approach.
  - Work in accordance with manufacturer's instructions for host machine, lifting accessories and quick hitches

# OTP Crane Op Exc: Crane Operator - Excavator Crane

#### **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency activities cannot be fully met.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Auxiliary systems, including release of brakes.
- d. Towing vehicle, including certification requirements and maximum allowable towing weight.
- e. Method approved to connect the towing machine to the failed machine.
- f. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- g. Duties of the operator when the failed vehicle brakes are still operational.
- h. Checks to be made of a machine that has been de-railed before it is rerailed and the competence requirements to carry out the checks

#### **Scope of Competence**

- 1. Emergency recovery activities are to:
- Confirm failed machine is prepared for safe towing.
- Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
- Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
- Confirm speed restrictions are adhered to at all times.
- Confirm communication is established and maintained with relevant personnel, communication is:

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

- i. Verbal
- ii. Written
- iii. Hand signals
- 2. For the failed machine, confirm that by use of the auxiliary system the machine:
  - Is in gauge.
  - Has the slew lock applied.
  - Boom and dipper-arm remain below cab.
  - Axle stabilisers are in the unlocked position.
- 3. Procedure in the event of an incident or accident including:
  - Accident/incident reporting
  - Checks of a de-railed machine
  - Requirements to be met before rerailing a derailed machine.

# **OTP Op Dump T - Machine Operator - Dump Truck**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Dump Truck.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Dump Truck & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Dump Truck on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Dump Truck safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Dump Truck.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re- Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

#### 5. Knowledge Evidence common to the whole unit

# You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10 When the machine horn should be sounded.
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery

# **OTP Op Dump T - Machine Operator - Dump Truck**

#### **Element 1: Carry out pre-work checks.**

#### **Performance Statements**

You must be able to:

- a. Work safely always, comply with health safety and other relevant regulations and guidelines.
- Follow the relevant machine safety & prework checks in accordance with instructions.
- Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- The purpose of rail navigation lights, and why road lights and flashing beacons are required to be turned off when in rail mode.
- d. What tests/checks must be undertaken for a complete pre-work check:

Checks include: fluids, including engine oil, fuel, coolant, lighting, horn, brakes, road & rail wheels, security of tow-bars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.

- e. Health & Safety features, including spillage control and fire prevention.
- f. What to do in the event of faults to the:
  - braking system
  - horn.
- g. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc. especially when articulated steering.
- How to recognise when the work required exceeds the limits of the operator competence.

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person affect the safety of the machine operation.

- Emergency tow bar.
- Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
- Check fluid levels as appropriate.
- Check correct operation of the horn.
- Correctly start the machine confirming area is clear of personnel and obstructions.
- Check rail navigation lights function, including changeover system and brake light isolation.
- Test all braking systems in road mode.
- Check safety & environmental features including spill kits and fire extinguishers.
- Check machine logbook entries and record results of checks & defects.
- Body panels, hatches or inspection covers are secure and replaced following checks.
- Obtain authority prior to moving machine.

completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

#### **OTP Op Dump T - Machine Operator - Dump Truck**

#### **Element 2: On and off tracking**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

# **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals

· Obtain authority and confirm that line is

#### **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the ontracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / cable routes / materials etc.
- b. Types of hazards associated with the on/off tracking point including:
  - Signal gantries / signalling equipment / OLE / catch pits / rail ends / discarded material etc including when it is safe to inspect the site.
- c. Hazards and control measures associated with:
  - On-tracking on a non-approved surface.
  - Adjacent lines if on/off tracking or operating.
  - · Mud covering the road wheels.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e and g.

Performance statement 'b, c, d and f' may be assessed by using a range of assessment

under possession and any traction current has been isolated prior to on-tracking.

- Safely on/off-track the machine.
- Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- Enter the on/off tracking area confirming a minimum of movements (reverse if possible)
- On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - . In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Op Dump T - Machine Operator - Dump Truck

#### Element 3: Operate the Road Rail Dump Truck safely

#### Performance Statements

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### **Knowledge statements**

You must have knowledge and understanding of:

- Hazards and special precautions required when operating the dump truck considering:
  - Weight / substance of load
  - · Height of load
  - · Track conditions
  - Safety when leaving the operating position.
  - Checks required in the operating position and on-track following loading operation.
  - When authority is granted to travel with long loads.
  - When discharging towards an adjacent line
  - When tipping wet, 'sticky' loads.
- b. Guidelines and operating procedures and position of safety when dump truck is being loaded.
- c. Actions to follow if overspill occurs.
- d. Lines and methods of communication.
- e. How to check for carrying capacity.
- f. Method of protection (including documentation) which must be in place prior to commencing work activities.
- g. The likely impact of your work on the operations of other departments and the impact of their work for you.

# **Scope of Competence**

- 1. Operating activities are to:
  - Correctly position the dump truck for loading
    - Travel controls in neutral
    - Park brake applied.

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work

- Safely load the Dump Truck, confirming:
  - Load is evenly distributed.
  - Vision is not obstructed.
  - No over-hanging load unless authorised.
  - Load does not exceed dump truck capacity.
- Safely and correctly travel the dump truck when loaded.
- Safely discharge the load, confirming:
  - The tipping area is free of obstruction.
  - Park brake, tipping controls and travel controls are operated correctly throughout the work.
- Identify restricted zones and apply appropriate protection arrangements.

checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# **OTP Op Dump T - Machine Operator - Dump Truck**

# **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency towing activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- Method of protection (including documentation) which must be in place prior to and during emergency recovery.
- d. Auxiliary systems, including release of brakes.
- e. Towing vehicle, including certification requirements and maximum allowable towing weight.
- f. Method approved to connect the towing machine to the failed Dump Truck.
- g. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- h. Duties of the operator when the failed vehicle brakes are still operational.

# **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.

#### Performance Evidence Requirements

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

- Confirm communication is established and maintained with relevant personnel, communication is:
  - i. Verbal
  - ii. Written
  - iii. Hand signals
- 2. For the failed machine, confirm that the machine:
  - Is in gauge.
  - The skip is in the lowered position.
  - All equipment is returned to safe position for towing.
  - Brakes/rail wheels are released once connected to the towing vehicle.

#### **OTP Op Dumper – Machine Operator – Dumper**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a dumper.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Dumper & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Dumper on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Dumper safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Dumper.

Where the person has been previously trained and has been completing the work for more than one year,

performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

# 5. Knowledge Evidence common to the whole unit

#### You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

# **OTP Op Dumper – Machine Operator – Dumper**

### Element 1: Carry out pre-work checks

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, comply with health safety and relevant regulations and quidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

#### Knowledge statements

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. The purpose of rail navigation lights, and why road lights and flashing beacons are required to be turned off when in rail mode.
- d. What tests/checks must be undertaken for a complete pre-work check.
  - Checks include: fluids, including engine oil, fuel, coolant, lighting, horn, brakes, road & rail wheels, security of tow-bars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.
- e. Health & Safety features, including spillage control and fire prevention.
- f. What to do in the event of faults to the:
  - braking system
  - horn
- g. Safe start up procedures, including checks made prior to operational controls test.
- h. Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc. especially when articulated steering.
- How to recognise when the work required exceeds the limits of the operator competence.

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Emergency tow bar.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - · Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check rail navigation lights function, including changeover system and brake light isolation.
  - Test all braking systems in road mode.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.
  - Obtain authority prior to moving machine.
- 2. Operational controls include (first confirming no line open to rail or plant movements can be fouled during testing / operation)
  - Skip raise / lower & swivel.
  - Steering including articulated.
  - · Rail bogies.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

# **OTP Op Dumper – Machine Operator – Dumper**

# Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved ontracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

#### **Knowledge statements**

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / cable routes / materials etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / signalling equipment / OLE / Catch pits / rail ends / discarded material etc. including when it is safe to inspect the site.
- c. Hazards and control measures associated with:
  - On tracking on a non-approved surface.
  - Adjacent lines if on/off tracking or operating.
  - Mud covering the road wheels.
  - Applying/ removal of articulation locking bar
  - Applying/ removal of hydraulic steering lock

# d. How to prevent a free wheel situation and what to be if the vehicle has started to run away.

- e. Lines and methods of communication, including:
  - When access route is considered unacceptable.
  - Those responsible for pre-planned safe system.
  - What to do if you lose sight of the Machine Controller.
  - Who authorises machine onto a level crossing.
- f. Method of protection (including documentation) which must be in place prior to entering the access point.
- g. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

#### **Scope of Competence**

- 1. On & off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on/off-track the machine.
  - Avoid causing any undue damage to the infrastructure whilst on/off-tracking.
  - Enter the on/off-tracking area confirming a minimum of movements (reverse if possible)
- 2. On/off-tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

# **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e and g.

Performance statement 'b, c, d and f' may be assessed by using a range of assessment methods including witness testimony, documented questioning or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

#### **OTP Op Dumper – Machine Operator – Dumper**

#### Element 3: Operate the Road Rail Dumper safely

#### Performance Statements

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.

#### Knowledge statements

- a. Hazards and special precautions required when operating the dumper considering:
  - Weight / substance of load
    - Height of load
    - Track conditions

- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work
- Safety if leaving the operating position
- Checks made in the operating position or track following loading operation.
- When authority is granted to travel with long loads.
- When discharging towards an adjacent line
- When skip slewed towards an adjacent line (impact on gauge and fouling of line)
- When tipping wet, 'sticky' loads
- Tip & travel operations

#### **Scope of Competence**

- 1. Operating activities are to:
  - · Correctly position the dumper for loading.
    - o Travel controls in neutral
    - Park brake applied.
  - Safely load the dumper, confirming:
    - Load is evenly distributed.
    - Vision is not obstructed.
    - No over-hanging load unless authorised.
    - Load does not exceed dumper capacity.
  - Safely and correctly travel the dumper when loaded.
  - Safely discharge the load, confirming:
    - The tipping area is free of obstruction.
    - Park brake, tipping controls and travel controls are operated correctly throughout the work.
  - Identify restricted zones and apply appropriate protection arrangements.

#### **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Op Dumper - Machine Operator - Dumper

#### **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

# Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Method of protection (including documentation) which must be in place prior to and during emergency recovery.
- d. Auxiliary systems, including release of brakes
- e. Towing vehicle, including certification requirements and maximum allowable towing weight.
- f. Method approved to connect the towing machine to the failed Dumper.
- g. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- h. Duties of the operator when the failed vehicle brakes are still operational.

# **Scope of Competence**

- 1. . Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness

towing.

- Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
- Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
- Confirm speed restrictions are adhered to at all times.
- Confirm communication is established and maintained with relevant personnel, communication is:

i. Verbal

ii. Written

iii. Hand signals

- For the failed machine, confirm that the machine:
  - Is in gauge.
  - The skip is in the lowered position.
  - Brakes/rail wheels are released once connected to the towing vehicle.

testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

### **OTP Op HBV - Machine Operator Highway Based Vehicle**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Highway based vehicle.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Highway based vehicle & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Highway based vehicle on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Highway based vehicle safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Highway based vehicle.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

## 5. Knowledge Evidence common to the whole unit

You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- What each of the component parts contributes to the operation of the OTP.
   Terminology and methods used to identify equipment and describe the operation of the OTP.
   Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines and methods of communication during emergency recovery.

## **OTP Op HBV - Machine Operator Highway Based Vehicle**

## Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- a. Work safely at all times comply with health safety & relevant regulations & guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records of checks accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

## Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. The purpose of rail navigation / marker lights and why road lights, brake lights and flashing amber beacons are switched off when on the
- d. How and when the horn must be used.
- e. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, road & rail tyres and wheels, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.

- Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the braking system, horn, tyres lights.
- Safe start up procedures, including checks

#### made prior to operational controls test.

- Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc.
- j. How to recognise when the work required exceeds operator competence limits.

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Emergency tow bar.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check rail marker lights including nonplatform lights.
  - Test all braking systems including hand and foot brake in road mode.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.
  - Obtain authority prior to moving machine first confirming area is clear of personnel, proximity hazards and adjacent lines cannot be fouled.
- 2. Operational controls include:
  - Crane / Legs / 3-way tipper.

## **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op HBV - Machine Operator Highway Based Vehicle**

## Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved ontracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence in agreed time scale.
- f. Use horn to warn of movements.

#### Knowledge statements

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / materials etc.
- Advantages of reversing onto on tracking area
- c. Types of hazards associated with the on/off tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / road traffic at crossings etc.
- d. Procedure to follow prior to carrying out

- g. Carry out an on-track brake test and confirm to relevant personnel.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- machine movements and why this must be adhered to.
- e. Action to take if rail brake test is unsatisfactory.
- f. Hazards and control measures associated with:
  - On-tracking on a non-approved surface.
  - Adjacent lines if on/off tracking or operating.
- g. Interpret & follow machine controller hand signals.
- h. Lines and methods of communication, including:
  - When access route is considered unacceptable.
  - Those responsible for pre-planned safe system
  - What to do if you lose sight of the Machine Controller.
- Protection Method (including documentation) that must be in place prior to entering the access point, who authorises movement onto a level crossing.
- j. Purpose of suspension hooks (where fitted)

## Scope of Competence

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals.
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on/off track the machine avoiding free wheel situations.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - . In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system.

## **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence. May include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination for the person completing performance statements: a, b, c, d, e, f and g.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op HBV - Machine Operator Highway Based Vehicle

#### Element 3: Operate the Road Rail Highway based vehicle safely

#### Performance Statements

You must be able to:

a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.

## **Knowledge statements**

You must have knowledge and understanding of:

a. Hazards and special precautions required when operating the Highway based vehicle considering:

- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.
- Track conditions
- Safety of the machine when leaving the operating position.
- b. Lines and methods of communication.
- c. How to check for carrying capacity.
- d. Method of protection (including documentation) which must be in place prior to commencing work activities.
- e. The likely impact of your work on the operations of other departments and the impact of their work for you.

#### **Scope of Competence**

- 1. Operating activities are to:
  - Safely and correctly travel the Highway based vehicle.
  - Identify restricted zones and apply appropriate protection arrangements.

## **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person delivering initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op HBV - Machine Operator Highway Based Vehicle**

## **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency towing activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Instructions regarding emergency stowing.
- d. Method of protection (including documentation) which must be in place prior to and during emergency recovery.
- e. Auxiliary systems, including release of brakes, including when to release the hand brake.
- f. Towing vehicle, including certification requirements and maximum allowable towing weight.
- g. Method approved to connect the towing machine to the failed Highway based vehicle.
- h. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- i. Duties of the operator when the failed vehicle brakes are still operational.

## **Scope of Competence**

## **Performance Evidence Requirements**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals.
- 2. For the failed machine, confirm that the machine:
  - Is correctly stowed.
  - Is in gauge using auxiliary systems.
  - Leg stabilisers (if fitted) are lifted after coupling is completed.
  - Any mounted lifting equipment is returned to safe position for towing.
  - Brakes/rail wheels are released once connected to the towing vehicle.

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

## **OTP Op Motor Trolley - Machine Operator - Motorised Trolley**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Motorised Trolley.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Motorised Trolley & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Motorised Trolley on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Motorised Trolley safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Motorised Trolley.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

## 5. Knowledge Evidence common to the whole unit

#### You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines and methods of communication during emergency recovery.

## **OTP Op Motor Trolley - Machine Operator - Motorised Trolley**

#### Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

#### Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, wheels, security of towbars, retaining bolts, pins and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
- f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the:
  - braking system
  - horn
- h. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including bridges / structures / location boxes / other plant etc.
- j. How to recognise when the work required exceeds operator competence limits.

### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.
  - Check rail navigation lights function correctly and that lenses are clean.
  - Test braking system, confirming braked wheels do not rotate prior to on-tracking the machine.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d & e.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op Motor Trolley - Machine Operator - Motorised Trolley**

## Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- Confirm that access and egress points and on/off tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.
- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on/off tracking points.

#### Knowledge statements

- a. Types of hazards associated with movement of the machine to the on-tracking point including:
  - Ground personnel / vehicles / manholes / cable routes / materials and tripping hazards etc
- b. Types of hazards associated with the on/off tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / discarded material etc including when it is safe to inspect the site.
- Hazards and control measures associated with adjacent lines if on/off-tracking or operating.
- d. Lines and methods of communication, including:
  - When access route is considered unacceptable
  - Those responsible for pre-planned safe system
  - What to do if you lose sight of the Machine Controller.
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- f. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals.
  - Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
  - Safely on/off track the machine, negotiating any proximity hazards, confirming area is clear of personnel.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op Motor Trolley - Machine Operator - Motorised Trolley

#### Element 3: Operate the Motorised Trolley safely

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work

## Knowledge statements

You must have knowledge and understanding of:

- Hazards and special precautions required when operating the Motorised Trolley considering:
  - Track conditions
  - Safety if leaving the operating position.
- b. Lines and methods of communication.
- c. Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

#### **Scope of Competence**

- 1. Operating activities are to:
  - Identify restricted zones and apply appropriate protection arrangements.

## Performance Evidence Requirements

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification
assessment may be collected through differing
types of workplace evidence and may include
direct observation, witness testimony, completed
reports of work checks, knowledge testing or a
combination of the above for the person
completing all relevant operating procedures.

## **OTP Op Motor Trolley - Machine Operator - Motorised Trolley**

## **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met

## **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards associated with removal from the line.
- What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.

## **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe removal.
  - Confirm machine is in gauge prior to manual movement along the track to removal point.
  - Propel the failed machine at a speed which is under control at all times.
  - Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
  - Confirm all loose materials are removed from the failed machine prior to removal.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals.

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

The purpose of this competence standard is to define the competence requirements for persons required to operate a self-propelled MEWP.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the self-propelled MEWP & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications. This competence standard shall be used to assess the competence of people who are required to operate the self-propelled MEWP on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the self-propelled MEWP safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a self-propelled MEWP.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

## 5. Knowledge Evidence common to the whole unit

You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

#### **OTP Op MEWP - Machine Operator - Self Propelled MEWP**

Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- Work safely always, comply with health safety and other relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. The PPE requirements of an operator, including fall arrest equipment.
- b. What operator documentation is required prior to and on completion to the work.
- c. The purpose of rail navigation lights, and why road lights and flashing beacons are required to be turned off when in rail mode.
- d. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, road & rail wheels, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.

- e. Health & Safety features, including spillage control and fire prevention.
- f. What to do in the event of faults to the:
  - braking system
  - horn
- g. Safe start up procedures, including checks made prior to operational controls test.
- h. Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc.
- How to recognise when the work required exceeds the limits of the operator competence.

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Emergency tow bar.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Correctly start the machine confirming area is clear of personnel and obstructions.
  - Check rail navigation lights function, including changeover system and brake light isolation.
  - Test all braking systems in road mode.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.
  - Obtain authority prior to moving machine.
- 2. Operational controls include (first confirming no line open to rail or plant movements can be fouled during testing / operation)
  - Basket and Boom functions

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

SteeringRail bogies

## OTP Op MEWP - Machine Operator - Self Propelled MEWP

#### Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved ontracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

#### Knowledge statements

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / cable routes / materials / limited tail swing clearance etc.
- b. Types of hazards associated with the on/off tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / discarded material etc including when it is safe to inspect the site.
- c. Hazards and control measures associated with:
  - On tracking on a non-approved surface.
  - Adjacent lines if on/off tracking or operating.
  - Mud covering the road wheels.
- d. How to prevent a free wheel situation and what to be if the vehicle has started to run away
- e. Lines and methods of communication, including:
  - When access route is considered unacceptable.
  - Those responsible for pre-planned safe system
  - What to do if you lose sight of the Machine Controller.
  - Who authorises machine onto a level crossing

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on/off track the machine.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
  - Enter the on/off tracking area carefully considering the shape and stability of the

## Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, and g.

Other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include

machine.

- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op MEWP - Machine Operator - Self Propelled MEWP

## Element 3: Operate the Road Rail Self Propelled MEWP safely

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is positioned and set- up and ready for the activities to be carried out.
- c. Carry out operating activities safely to the required specification in the correct sequence and in an agreed time scale.
- d. Correctly stow the machine following use.
- Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### Knowledge statements

You must have knowledge and understanding of:

- Hazards and special precautions required when operating the self-propelled MEWP considering:
  - Overhead lines
  - Signals / gantries
  - Buildings / structures
  - Voids under sleepers
  - Missing track fastenings
  - Requirement to slew the platform over an adjacent track.
- Guidelines and operating procedures and position of safety when operating the selfpropelled MEWP.
- Confirm combined weight of tools and personnel do not exceed the safe working load, and store material and tools within the platform.
- d. Lines and methods of communication.
- e. Where to secure the harness to when machine is operating.
- f. How to check for maximum operating cant and SWL.
- g. Method of protection (including documentation) which must be in place prior to commencing work activities.
- h. The effects of high wind on the operation when platform elevated.
- The likely impact of your work on the operations of other departments and the impact of their work for you.

### **Scope of Competence**

- 1. Operating activities are to:
  - Correctly position the self-propelled MEWP for work and identify the work area.
  - Safely and correctly travel the selfpropelled MEWP, confirming a competent person is on-site to effect an emergency recovery of the basket.
  - Identify restricted zones and apply appropriate protection arrangements.
  - Safely return the platform to the stowed

### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c and d.

Performance statement 'e' may be assessed by using a range of assessment methods including

position following use.

 Demonstrate the safe recovery of the elevated platform using the emergency/auxiliary system(s). witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op MEWP - Machine Operator - Self Propelled MEWP

#### **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency towing activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

## Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Method of protection (including documentation) which must be in place prior to and during emergency recovery.
- d. Auxiliary systems, including release of brakes.
- e. Towing vehicle, including certification requirements and maximum allowable towing weight.
- f. Method approved to connect the towing machine to the failed self-propelled MEWP.
- g. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- h. Duties of the operator when the failed vehicle brakes are still operational.

#### **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
- 2. For the failed machine, confirm that the machine:
  - Is in gauge.
  - The platform is in the lowered position and

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

stowed correctly.

- All equipment is returned to safe position for towing.
- Brakes/rail wheels are released once connected to the towing vehicle.

#### **OTP Op B Packer - Machine Operator - Ballast Packer**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Ballast Packer.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Ballast Packer and carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required. They will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Ballast Packer on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Ballast Packer.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures

## 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Ballast Packer.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

#### 5. Knowledge Evidence common to the whole unit

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

## OTP Op B Packer - Machine Operator - Ballast Packer

### Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation and equipment required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

### **Knowledge statements**

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. What tests/checks must be undertaken for a complete pre-work check.

Checks include Fluids, including engine oil, fuel, coolant, lighting, horn, brakes, wheels, security of towbars, retaining bolts, pins, and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
- f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the:
  - braking system
  - horn.
- h. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including bridges / structures / location boxes / other plant etc.
- j. How to recognise when the work required exceeds operator competence limits.
- k. Equipment required for trackside stillage, cross-tracking and turning the machine.

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d & e.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

- Check rail navigation lights function correctly and that lenses are clean.
- Test braking system, confirming braked wheels do not rotate prior to on-tracking the machine.
- Check safety & environmental features including spill kits and fire extinguishers.
- Check machine logbook entries and record results of checks & defects.
- Body panels, hatches or inspection covers are secure and replaced following checks.
- 2. Equipment includes:
  - 4 wire ropes, 2 cross-tracking bars, 2 four footbars, 'H' frame, wander lead.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op B Packer - Machine Operator - Ballast Packer

## Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- Confirm that access and egress points and on/off-tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.
- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & offtracking activities cannot be fully met or where there are identified defects with the access / egress points or the on/off-tracking points.

#### **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Ground personnel / vehicles / manholes / cable routes / materials and tripping hazards etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / Signalling equipment /
    OLE / catch pits / rail ends / third rail /
    discarded material etc. including when it is
    safe to inspect the site.
- Hazards and control measures associated with adjacent lines if on/off-tracking or operating.
- d. Lines and methods of communication, including:
  - When access route is considered unacceptable.
  - Those responsible for pre-planned safe system.
  - What to do if you lose sight of the Machine Controller.
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- Procedure to follow prior to carrying out machine movements and why this must be adhered to.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel i.e., MC, COSS, ES etc., communication is:

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

- i. Verbal
- ii. Written
- iii. Hand signals
- Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
- Safely on/off-track the machine, negotiating any proximity hazards, confirming area is clear of personnel.
- Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- On/off-tracking procedures include access via:
  - Lifting or driving the machine onto the track at approved access point (confirm approved manual handling techniques are used).

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op B Packer - Machine Operator - Ballast Packer

## **Element 3: Operate the Ballast Packer**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### **Knowledge statements**

You must have knowledge and understanding of:

- Hazards and special precautions required when operating the Ballast Packer considering:
  - Track conditions.
  - Safety if leaving the operating position.
- b. Lines and methods of communication.
- c. Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

## **Scope of Competence**

- 1. Operating activities are to:
  - Identify restricted zones and apply appropriate protection arrangements.
  - Turn and cross-track the machine safely

## **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person

completing all relevant operating procedures.

## OTP Op B Packer - Machine Operator - Ballast Packer

## **Element 4: Emergency Procedures**

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with removal from the line.
- b. What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.
- f. Use of manual pump and associated valves for emergency stowage.

## **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe removal.
  - Confirm machine is in gauge prior to manual movement along the track to removal point.
  - Propel the failed machine at a speed which is under control at all times.
  - Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
  - Confirm all loose materials are removed from the failed machine prior to removal.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

## **OTP Op Gopher - Machine Operator - Trac Gopher**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Tracgopher.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Tracgopher and carry out emergency procedures within a possession on Network Rail Managed

#### Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required. They will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Tracgopher on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Tracgopher.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Tracgopher.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

#### 5. Knowledge Evidence common to the whole unit

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology & methods used to identify equipment & describe the OTP operation.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

#### Element 1: Carry out pre-work checks

#### **Performance Statements**

You must be able to:

- Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation and equipment required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

## **Knowledge statements**

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, wheels, security of towbars, retaining bolts, pins, and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
- f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the:
  - braking system
  - horn.
- h. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including bridges / structures / location boxes / other plant etc.
- j. How to recognise when the work required exceeds operator competence limits

#### **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.
  - Check rail navigation lights function correctly and that lenses are clean.
  - Test braking system, confirming braked wheels do not rotate prior to on-tracking the machine.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Op Gopher - Machine Operator - Trac Gopher Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- Confirm that access and egress points and on/off-tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.
- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the access / egress points or the on/off-tracking points.

#### **Knowledge statements**

You must have knowledge and understanding of:

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Ground personnel / vehicles / manholes / cable routes / materials and tripping hazards etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / third rail / discarded material etc. including when it is safe to inspect the site.
- Hazards and control measures associated with adjacent lines if on/off-tracking or operating.
- d. Lines and methods of communication, including:
  - When access route is considered unacceptable.
  - Those responsible for pre-planned safe system.
  - What to do if you lose sight of the Machine Controller.
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- f. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
  - Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
  - Safely on/off-track the machine, negotiating any proximity hazards, confirming area is clear of personnel.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- On/off-tracking procedures include access via:
  - Lifting or driving the machine onto the track at approved access point (confirm approved manual handling techniques are used

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op Gopher - Machine Operator - Trac Gopher**

#### **Element 3: Operate the Tracgopher**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

## Scope of Competence

- 1. Operating activities are to:
  - Identify restricted zones and appropriate protection arrangements.
  - Carry out ballast removal safely.

## **Knowledge statements**

You must have knowledge and understanding of:

- a. Hazards and special precautions required when operating the Tracgopher considering:
  - Track conditions
  - Safety if leaving the operating position.
- b. Lines and methods of communication.
- c. Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

## **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

#### **OTP Op Gopher - Machine Operator - Trac Gopher**

## **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances

## Knowledge statements

- a. Types of hazards associated with removal from the line.
- b. What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.

where the emergency recovery activities cannot be fully met.

## **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe removal.
  - Confirm machine is in gauge prior to manual movement along the track to removal point.
  - Propel the failed machine at a speed which is under control at all times.
  - Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
  - Confirm all loose materials are removed from the failed machine prior to removal.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

#### **OTP Op Clipper - Machine Operator - Clipper**

## 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Clipper.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Clipper and carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required. They will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Clipper on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Clipper

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Clipper.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

## 5. Knowledge Evidence common to the whole unit

You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the OTP operation.
- Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

#### **OTP Op Clipper - Machine Operator - Clipper**

## Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation and equipment required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

## Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. What tests/checks must be undertaken for a complete pre-work check.

Checks include Fluids, including engine oil, fuel, coolant, lighting, horn, brakes, wheels, security of towbars, retaining bolts, pins, and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
- f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the:
  - braking system
  - horn.
- h. Safe start up procedures, including checks made prior to operational controls test.
- i. Type and proximity of hazards including bridges / structures / location boxes / other

#### plant etc.

- j. How to recognise when the work required exceeds operator competence limits.
- k. Equipment required for trackside stillage, cross-tracking and turning the machine.

## **Scope of Competence**

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.
  - Check rail navigation lights function correctly and that lenses are clean.
  - Test braking system, confirming braked wheels do not rotate prior to on-tracking the machine.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.
- 2. Equipment includes:
  - 4 wire ropes, 2 cross-tracking bars, 2 fourfoot bars, 'H' frame, wander lead.

## **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d & e.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

#### OTP Op Clipper - Machine Operator - Clipper

#### Element 2: On and off tracking

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- Confirm that access and egress points and on/off-tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.
- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & off tracking activities cannot be fully met or

#### **Knowledge statements**

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Ground personnel / vehicles / manholes / cable routes / materials and tripping hazards etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / third rail / discarded material etc. including when it is safe to inspect the site.
- c. Hazards and control measures associated with adjacent lines if on/off-tracking or operating.
- d. Lines and methods of communication, including:
  - When access route is considered unacceptable.

where there are identified defects with the access / egress points or the on/off-tracking points.

- Those responsible for pre-planned safe
- What to do if you lose sight of the Machine Controller.
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- f. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel, communication is:

    - i. Verbal ii. Written
    - iii. Hand signals
  - Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
  - Safely on/off-track the machine, negotiating any proximity hazards, confirming area is clear of personnel.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- 2. On/off-tracking procedures include access via:
  - Lifting or driving the machine onto the track at approved access point (confirm approved manual handling techniques are used)

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op Clipper - Machine Operator - Clipper**

#### **Element 3: Operate the Clipper**

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

## **Scope of Competence**

- 1. Operating activities are to:
  - Identify restricted zones and appropriate protection arrangements.
  - Turn and safely cross-track the machine.

## **Knowledge statements**

You must have knowledge and understanding of:

- a. Hazards and special precautions required when operating the Clipper considering:
  - Track conditions
  - Safety if leaving the operating position.
- b. Lines and methods of communication.
- c. Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

#### **Performance Evidence Requirements**

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks,

knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Op Clipper - Machine Operator - Clipper**

## **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

## **Knowledge statements**

You must have knowledge and understanding of:

- a. Types of hazards associated with removal from the line.
- What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.
- f. Use of manual pump and associated valves for emergency stowage

## **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe removal.
  - Confirm machine is in gauge prior to manual movement along the track to removal point.
  - Propel the failed machine at a speed which is under control at all times.
  - Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
  - Confirm all loose materials are removed from the failed machine prior to removal.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written

## **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

iii. Hand signals

#### **OTP Op HPV - Machine Operator - Highway Permissible Vehicle**

## 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Highway based vehicle.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Highway based vehicle & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Highway based vehicle on Network Rail Managed Infrastructure.

## 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the Highway based vehicle safely.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Highway based vehicle.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

# 5. Knowledge Evidence common to the whole unit You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.

- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines and methods of communication during emergency recovery.

## OTP Op HPV - Machine Operator - Highway Permissible Vehicle

## Element 1: Carry out pre-work checks.

#### Performance statements

You must be able to:

- a. Work safely at all times comply with health safety & relevant regulations & guidelines.
- b. Follow the relevant machine safety & pre-work checks in accordance with instructions.
- c. Confirm documentation required with the machine.
- d.Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the pre-work check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records of checks accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

## **Scope of Competence**

- 1. Safety & pre-work checks will include checks to:
- Identify and report any faults that may affect the safety of the machine operation.
- Emergency tow bar.
- Rail wheels including 'flange' damage 'flat spots' or 'play' in rail wheel bearings.
- Check fluid levels as appropriate.
- Check correct operation of the horn.
- Correctly start the machine confirming area is clear of personnel and obstructions.
- Check rail marker lights including non-platform lights.
- Test all braking systems including hand and foot brake in road mode.
- Check safety & environmental features including spill kits and fire extinguishers.
- Check machine logbook entries and record results of checks & defects.
- Body panels, hatches or inspection covers are secure and replaced following checks.
- Obtain authority prior to moving machine first confirming area is clear of personnel, proximity hazards and adjacent lines cannot be fouled.
- 2. Operational controls include:
- Crane / Legs / 3 way tipper

#### Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. The purpose of rail navigation / marker lights and why road lights, brake lights and flashing amber beacons are switched off when on the track.
- d. How and when the horn must be used.
- e. What tests/checks must be undertaken for a complete pre-work check.

Checks include: Fluids, including engine oil, fuel, coolant, Lighting, Horn, Brakes, Road & Rail tyres and wheels, Security of tow-bars, doors, Retaining bolts, pins and clips, hydraulic hoses & general fixings.

- f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the: braking system, horn, tyres, lights
- h. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc
- j. How to recognise when the work required exceeds operator competence limits.

#### Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

## OTP Op HPV - Machine Operator - Highway Permissible Vehicle

## Element 2: On and off tracking

#### Performance statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and quidelines.
- b. Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved ontracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence in agreed time scale.
- f. Use horn to warn of movements.
- g. Carry out an on-track brake test and confirm to relevant personnel.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of

## Scope of Competence

- 1. On & off tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal ii) Written iii) Hand-signals.
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on/off track the machine avoiding free Performance Evidence Requirements wheel situations.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- 2. On/off tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - . In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

#### Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with movement of the machine to the ON tracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / materials etc.
- b. Advantages of reversing onto ON tracking area.
- c. Types of hazards associated with the ON/OFF tracking point including:
  - Signal Gantries / Signalling equipment / OLE / catch pits / rail ends / road traffic at crossings etc.
- d. Procedure to follow prior to carrying out machine movements and why this must be adhered to.
- e. Action to take if rail brake test is unsatisfactory.
- f. Hazards and control measures associated with:
  - a. On tracking on a non-approved surface.
  - b. Adjacent lines if on/off tracking or operating.
- 7. Interpret & follow machine controller hand signals.
- 8. Lines and methods of communication, including:
- When access route is considered unacceptable
- Those responsible for pre-planned safe system
- What to do if you lose sight of the Machine Controller
- 9. Protection method (including documentation) that must be in place prior to entering the access point, who authorises movement onto a level crossing.
- 10. Purpose of suspension hooks (where fitted).

Evidence for initial assessment must be collected through differing types of workplace evidence. May include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination for the person completing performance statements: a, b, c, d, e, f and g.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## OTP Op HPV - Machine Operator - Highway Permissible Vehicle

#### Element 3: Operate the Road Rail Highway based vehicle safely

#### Performance statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

### **Scope of Competence**

- 1. Operating activities are to:
  - Safely and correctly travel the Highway based vehicle.
  - Identify restricted zones and apply appropriate protection arrangements.

#### Knowledge statements

You must have knowledge and understanding of:

- a. Hazards and special precautions required when operating the Highway based vehicle considering:
  - I. Track conditions
  - II. Safety of the machine when leaving the operating position
- b. Lines and methods of communication.
- c. How to check for carrying capacity.
- d. Method of protection (including documentation) which must be in place prior to commencing work activities.
- e. The likely impact of your work on the operations of other departments and the impact of their work for you.

## Performance Evidence Requirements

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person delivering initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

## **OTP Crane Op - Crane Operator - Lorry Loader Crane**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Lorry Loader Crane.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the crane as a lorry loader crane within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the lorry loader crane on Network Rail Managed Infrastructure.

## 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the lorry loader crane safely.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must hold as a prerequisite the OTP Core module and be assessed as competent in units of competence Machine Operator - HPV and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating an Excavator Crane.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 6.3.

#### 5. Knowledge Evidence common to the whole unit

- 49. What equipment certification / documentation is required.
- 50. Procedures to confirm operational and personal safety is maintained during the work.
- 51. How movement & operation of OTP may affect the safe operation of the railway.
- 52. The operating and care and control procedures applicable.
- 53. Reporting lines, communication protocols and procedures.
- 54. How the systems function under normal operating conditions.
- 55. What each of the component parts contributes to the operation of the OTP.
- 56. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 57. The compatibility of host machine, equipment, and attachments.

- 58. Safe start up procedures, including checks prior to operational controls test.
- 59. The machine lift duty charts and the limitations for the intended lift
- 60. When the machine horn should be sounded
- 61. Work procedures and hazards when adjacent lines are open to traffic.
- 62. What authorisation procedures are and limits of your responsibility and authority.
- 63. What procedures apply to taking the equipment out of operational service.
- 64. Types of hazards, lines, and methods of communication during emergency recovery.

## **OTP Crane Op - Crane Operator - Lorry Loader**

### Element 1: Carry out pre-work checks.

#### **Performance statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Follow the relevant machine safety and pre-work checks in accordance with instructions.
- c. Confirm the host machine can operate with lifting equipment or quick hitch.
- d. Confirm the documentation which is required with the machine.
- e. Confirm that the machine meets the required operating specification and assess the condition.
- f. Carry out the maintenance activities within the limits of the prework checks.
- g. Identify and report any instances where the required specification cannot be fully met or where there are identified defects.
- h. Complete relevant pre-work check records accurately and pass them to the appropriate person.
- Dispose of waste material in accordance with safe working practices and approved procedures.

#### Knowledge statements

You must have knowledge and understanding of:

- a. What the PPE requirements of an operator are
- What operator documentation is required prior to and on completion of work.
- c. Type and proximity of hazard including signal gantries, structures, lineside fixtures, lines open to traffic, other vehicles, and ground personnel.
- d. The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode.
- e. What type of defects can occur and how to check for these, including brake systems and horn.
- f. What tests/checks must be undertaken for a complete pre-work check, including: fluids, lighting, horn, brakes, road & rail wheels, motion restriction systems, equipment & attachments are correctly attached to host machine, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.
- g. Health & safety features, including spillage control and fire prevention.
- Safe start up procedures, including checks made prior to operational controls test.
- i. Limits of the operator competence

## Scope of Competence

- 1. Safety and pre-work checks will include:
  - Visual checks
  - Identify any faults that may affect the safety of the machine.
  - Check fluid levels including hydraulic, engine, fuel, coolant, screen wash etc.
  - Rail wheels including 'flange' damage, 'flat spots or 'play' in rail wheel bearings.
  - · Correctly start the machine

## Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, d, e, and g for all applicable items in scope statement 1.

The remaining performance statements may be assessed by using

- confirming area is clear of personnel and obstructions.
- Check for correct function of lights, including rail navigation lights and brake light isolation.
- Check the operation of the horn.
- Check all operational controls are functioning correctly.
- Test motion restriction systems e.g., height and slew limiters.
- Test all braking systems in road mode.
- Check compatibility of machine, equipment & attachments.
- Check required documentation and confirm it is current.
- Check method statement contains machine type, equipment & attachments including quick hitches.
- Check safety & environmental features including spill kits and fire extinguishers.
- Confirm body panels, hatches or inspection covers are replaced and secure following checks.
- Check machine logbook entries and record results of checks and identified defects.

a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures

### **OTP Crane Op - Crane Operator - Lorry Loader**

#### Element 2: On and off tracking

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Identify the approved method of travelling from the stabling point to the access point confirm suitability, size of route and proximity hazards.
- c. Travel from the stabling point to approved on- tracking point, avoiding any hazards.
- d. Confirm that on and off tracking points are approved and fit for purpose.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale, using horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

## **Knowledge statements**

- Types of hazards associated with movement of the machine to the ontracking point including:
  - Pedestrians / ground personnel / vehicles / man- hole inspection covers / buildings / cable routes/ materials etc.
- b. Types of hazards associated with the on/off- tracking point including:
  - Signal gantries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc. including when it is safe to inspect the site.
- c. Lines and methods of communication, including:
  - Situations where access route is found to be unacceptable.
  - Personnel responsible for the preplanned safe system
  - Safe system of work (including

- documentation) which must be in place prior to entering the access point.
- Types of hazards associated with adjacent lines when open to traffic.
- Procedure to follow prior to carrying out machine movements.

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/offtracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal
    - ii) Written
    - iii) Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on-track the machine.
  - Confirm that the machine is in the correct configuration for travel including, in gauge and steering locks applied etc.
  - Safely off-track the machine
- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'e' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Crane Op - Crane Operator - Lorry Loader

### Element 3: Operate the Road Rail Excavator safely

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Confirm that buried services procedures are undertaken prior to operating the machine.
- d. Carry out operating activities to the required specification in the correct sequence and in an agreed time

#### **Knowledge statements**

- Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line.
- b. Lines and methods of communication, including:
  - Situations where access or travel route in road or rail mode is found to be unacceptable.
  - Personnel responsible for buried services check and method of

- scale.
- Report any instances where excavation requirements cannot be fully met or where there are identified defects prior to or on completion of the work.
- confirming, approval to begin excavations.
- c. Method of protection (including documentation) which must be in place prior to commencing excavations.
- d. Operating & manufacturer's requirements & instructions applicable to the safe use of host machine, equipment & attachments.
- e. Method for confirming compatibility of the lifting accessory or quick hitch with the lifting equipment.
- f. Able to differentiate between quick hitches as a lifting accessory &/or lifting equipment.
  - Approved method of using quick hitches or lifting accessories.
- g. Types of buckets required for the task.
- h. Work procedures and hazards associated with adjacent lines, where open to traffic.
- i. Safe loading and unloading of rail wagons.
- The likely impact of your work on the operations of other departments and the impact of their work for you.
- k. Regulations, guidelines, and operating procedures for; motion restriction systems; offset booms; effects of cant on machine stability & buried services.

- 1. Operating activities are to:
  - Select & correctly attach approved bucket(s)
  - Correctly set the Rated Capacity Indicator, (RCI) for excavating duties, where fitted.
  - Install/remove a quick hitch device.
    - v.Confirm correct attachment to host machine.
    - vi.Confirm retaining bar and/or safety locking bar is correctly located.
  - Confirm machine remains stable at all times through correct machine movement, use of RCI, axle stabilisers and machine controls.
  - Minimise contact with the vehicle being loaded / unloaded, confirming an even load distribution throughout.
  - Complete work to required tolerances including excavation, reinstatement, and levelling.
  - Confirm communication is maintained with relevant personnel, communication is:

### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence, and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c, d and f. for all applicable items in scope statement 1 & 2.

Performance statement 'f' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### vii. Verbal

### viii. Hand signals

- 2. Operating procedures are to:
  - Set & test the RCI equipment including motion restriction systems.
  - Confirm the whereabouts of obstructions, cables, or other underground services prior to excavating.
  - Identify restricted zones & protection arrangements.
  - Work adjacent to lines open to rail movements, including when trains approach.
  - Work in accordance with manufacturer's instructions for host machine, lifting accessories and quick hitches

### OTP Crane Op - Crane Operator - Lorry Loader

### **Element 4: Emergency Procedures**

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency activities cannot be fully met.

# Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Auxiliary systems, including release of brakes.
- d. Towing vehicle, including certification requirements and maximum allowable towing weight.
- e. Method approved to connect the towing machine to the failed machine.
- f. Maximum speed at which towing vehicle may travel whilst towing failed machine.
- g. Duties of the operator when the failed vehicle brakes are still operational.
- h. Checks to be made of a machine that has been de-railed before it is rerailed and the competence requirements to carry out the checks

#### **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with

#### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

relevant personnel, communication is:

- i. Verbal
- ii. Written
- iii. Hand signals
- 2. For the failed machine, confirm that by use of the auxiliary system the machine:
  - Is in gauge.
  - Has the slew lock applied.
  - Boom and dipper-arm remain below cab.
  - Axle stabilisers are in the unlocked position.
- 3. Procedure in the event of an incident or accident including:
  - Accident/incident reporting
  - · Checks of a de-railed machine
  - Requirements to be met before rerailing a derailed machine.

#### **OTP Op MEWP Att - Machine Operator - MEWP Attachment**

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a MEWP attachment.

### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the MEWP attachment & carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required, they will be responsible for adhering to the instructions and will work within set procedures and specifications. This competence standard shall be used to assess the competence of people who are required to operate the MEWP attachment on Network Rail Managed Infrastructure.

### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the MEWP attachment safely.

Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

### 4. Assessment

### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a MEWP attachment.

Where the person has been previously trained and has been completing the work for more than one year,

performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

# 5. Knowledge Evidence common to the whole unit

### You must have knowledge and understanding of:

- 15. What equipment certification / documentation is required.
- 16. Procedures to confirm operational and personal safety is maintained during the work.
- 17. How movement & operation of OTP may affect the safe operation of the railway.
- 18. The operating and care and control procedures applicable.
- 19. Reporting lines, communication protocols and procedures.
- 20. How the systems function under normal operating conditions.
- 21. What each of the component parts contributes to the operation of the OTP.
- 22. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 23. Safe start up procedures, including checks prior to operational controls test.
- 24. When the machine horn should be sounded
- 25. Work procedures and hazards when adjacent lines are open to traffic.
- 26. What authorisation procedures are and limits of your responsibility and authority.
- 27. What procedures apply to taking the equipment out of operational service.
- 28. Types of hazards, lines, and methods of communication during emergency recovery.

# **OTP Op MEWP Att - Machine Operator - MEWP Attachment**

### Element 1: Carry out pre-work checks.

#### **Performance Statements**

You must be able to:

- Work safely always, comply with health safety and other relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.

#### Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator, including fall arrest equipment.
- b. What operator documentation is required prior to and on completion to the work.
- c. The purpose of rail navigation lights, and why road lights and flashing beacons are required to be turned off when in rail mode.
- d. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, road & rail wheels, security of towbars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings.

- e. Health & Safety features, including spillage control and fire prevention.
- f. What to do in the event of faults to the:
  - braking system
  - horn
- g. Safe start up procedures, including checks made prior to operational controls test.
- h. Type and proximity of hazards including overhead wires and cables / bridges / signal gantries / structures / location boxes lines open to rail movements /other plant etc.
- How to recognise when the work required exceeds the limits of the operator competence.

#### **Scope of Competence**

# Performance Evidence Requirements

- 1. Safety & pre-work checks will include checks to:
- Identify and report any faults that may affect the safety of the machine operation.
- Emergency tow bar.
- Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
- Check fluid levels as appropriate.
- Check correct operation of the horn.
- Correctly start the machine confirming area is clear of personnel and obstructions.
- Check rail navigation lights function, including changeover system and brake light isolation.
- Test all braking systems in road mode.
- Check safety & environmental features including spill kits and fire extinguishers.
- Check machine logbook entries and record results of checks & defects.
- Body panels, hatches or inspection covers are secure and replaced following checks.
- Obtain authority prior to moving machine.
- 2. Operational controls include (first confirming no line open to rail or plant movements can be fouled during testing / operation)
  - · Basket and Boom functions
  - Steering
  - Rail bogies

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### **OTP Op MEWP Att - Machine Operator - MEWP Attachment**

### Element 2: On and off tracking

#### Performance Statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- c. Confirm that access and egress points are approved and fit for purpose.
- d. Travel from the stabling point to approved ontracking point, avoiding any hazards.
- e. Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- f. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on & off tracking points.
- g. Carry out an on-track brake test and confirm to relevant personnel.

### **Knowledge statements**

- a. Types of hazards associated with movement of the machine to the on-tracking point including:
  - Pedestrians / ground personnel / vehicles / manhole covers / buildings / cable routes / materials / limited tail swing clearance etc.
- b. Types of hazards associated with the on/off tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / discarded material etc including when it is safe to inspect the site.
- c. Hazards and control measures associated with:
  - On tracking on a non-approved surface.
  - Adjacent lines if on/off tracking or operating.
  - Mud covering the road wheels.
- d. How to prevent a free wheel situation and what to be if the vehicle has started to run away.
- e. Lines and methods of communication, including:

# • When access route is considered unacceptable.

- Those responsible for pre-planned safe system
- What to do if you lose sight of the Machine Controller.
- Who authorises machine onto a level crossing

# **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Determine approved access /egress points.
  - Determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - iv. Verbal
    - v. Written
    - vi. Hand signals
  - Obtain authority and confirm that line is under possession and any traction current has been isolated prior to on-tracking.
  - Safely on/off track the machine.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
  - Enter the on/off tracking area carefully considering the shape and stability of the machine.
- 2. On/Off Tracking procedures include access via:
  - Level crossing
  - Concrete pad
  - In fill of ballast to the rail head
  - Area decked out with sleepers or timber.
  - Other approved on tracking system

# **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, and g.

Other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### **OTP Op MEWP Att - Machine Operator - MEWP Attachment**

### Element 3: Operate the MEWP attachment safely

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- Confirm that the machine is positioned and set- up and ready for the activities to be carried out.
- c. Carry out operating activities safely to the required specification in the correct sequence and in an agreed time scale.
- d. Correctly stow the machine following use.
- e. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### Knowledge statements

- a. Hazards and special precautions required when operating the self-propelled MEWP considering:
  - Overhead lines
  - Signals / gantries
  - Buildings / structures
  - Voids under sleepers
  - Missing track fastenings
  - Requirement to slew the platform over an adjacent track.
- b. Guidelines and operating procedures and position of safety when operating the self-propelled MEWP.
- c. Confirm combined weight of tools and personnel do not exceed the safe working

- load, and store material and tools within the platform.
- d. Lines and methods of communication.
- e. Where to secure the harness to when machine is operating.
- f. How to check for maximum operating cant and SWL.
- g. Method of protection (including documentation) which must be in place prior to commencing work activities.
- h. The effects of high wind on the operation when platform elevated.
- The likely impact of your work on the operations of other departments and the impact of their work for you.

- 1. Operating activities are to:
  - Correctly position the MEWP attachment for work and identify the work area.
  - Safely and correctly travel the MEWP attachment, confirming a competent person is on-site to effect an emergency recovery of the basket.
  - Identify restricted zones and apply appropriate protection arrangements.
  - Safely return the platform to the stowed position following use.
  - Demonstrate the safe recovery of the elevated platform using the emergency/auxiliary system(s).

### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b, c and d.

Performance statement 'e' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# OTP Op MEWP Att - Machine Operator - MEWP Attachment

#### **Element 4: Emergency Procedures**

#### Performance Statements

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to safely prepare a failed machine for emergency recovery.
- c. Confirm the requirements of the towing vehicle prior to emergency recovery activities.
- d. Carry out emergency towing activities in the specified sequence.
- e. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

### **Knowledge statements**

- a. Types of hazards associated with emergency recovery.
- b. Lines and methods of communication during emergency recovery.
- c. Method of protection (including documentation) which must be in place prior to and during emergency recovery.
- d. Auxiliary systems, including release of brakes.
- e. Towing vehicle, including certification requirements and maximum allowable towing weight.
- Method approved to connect the towing machine to the failed MEWP attachment.
- g. Maximum speed at which towing vehicle may

# travel whilst towing failed machine.

h. Duties of the operator when the failed vehicle brakes are still operational.

# **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe towing.
  - Connect the failed machine to the towing vehicle using the approved tow bar, in the correct sequence.
  - Confirm release and subsequent operation of brakes is undertaken in the correct sequence.
  - Confirm speed restrictions are adhered to at all times.
  - Confirm communication is established and maintained with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
- For the failed machine, confirm that the machine:
  - Is in gauge.
  - The platform is in the lowered position and stowed correctly.
  - All equipment is returned to safe position for towing.
  - Brakes/rail wheels are released once connected to the towing vehicle.

### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

### **OTP Op Mini Tamper - Machine Operator - Mini Tamper**

### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a mini tamper.

### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the mini tamper and carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required. They will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the mini tamper on Network Rail Managed Infrastructure.

#### 3. Competence Standard

This Competence Standard comprises four elements:

Element 1 Carry out pre-work checks.

Element 2 On and Off Tracking.

Element 3 Operate the mini tamper.

Element 4 Emergency procedures.

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the

machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 5. Assessment

#### 5.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a mini tamper.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

#### 5.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

### 6. Knowledge Evidence common to the whole unit

### You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology & methods used to identify equipment & describe the OTP operation.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines, and methods of communication during emergency recovery.

# **OTP Op Mini Tamper - Machine Operator - Mini Tamper**

### Element 1: Carry out pre-work checks

#### **Performance Statements**

You must be able to:

- Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework checks in accordance with instructions.
- c. Confirm documentation and equipment required with the machine.
- d. Confirm the machine meets required operating specification and assess condition.
- e. Carry out the maintenance activities & operational controls check within the prework check.
- f. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
- b. What operator documentation is required prior to and on completion to the work.
- c. What tests/checks must be undertaken for a complete pre-work check.

Checks include fluids, including engine oil, fuel, coolant, lighting, horn, brakes, wheels, security of towbars, retaining bolts, pins, and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
- Health & Safety features, including spillage control and fire prevention.

- g. Complete relevant records accurately and pass them on to the appropriate person.
- h. Dispose of waste materials in accordance with safe practices and approved procedures.
- g. What to do in the event of faults to the:
  - · braking system
  - horn.
- h. Safe start up procedures, including checks made prior to operational controls test.
- Type and proximity of hazards including bridges / structures / location boxes / other plant etc.
- j. How to recognise when the work required exceeds operator competence limits

- Safety & pre-work checks will include checks to:
  - Identify and report any faults that may affect the safety of the machine operation.
  - Rail wheels including 'flange' damage 'flat spots or 'play' in rail wheel bearings.
  - Check fluid levels as appropriate.
  - Check correct operation of the horn.
  - Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.
  - Check rail navigation lights function correctly and that lenses are clean.
  - Test braking system, confirming braked wheels do not rotate prior to on-tracking the machine.
  - Check safety & environmental features including spill kits and fire extinguishers.
  - Check machine logbook entries and record results of checks & defects.
  - Body panels, hatches or inspection covers are secure and replaced following checks.

### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person completing all relevant procedures in respect of performance statements: a, b, c, and d.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# **OTP Op Mini Tamper - Machine Operator - Mini Tamper**

# Element 2: On and off tracking

### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- c. Confirm that access and egress points and on/off-tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.

### **Knowledge statements**

- Types of hazards associated with movement of the machine to the on-tracking point including:
  - Ground personnel / vehicles / manholes / cable routes / materials and tripping hazards etc.
- b. Types of hazards associated with the on/off-tracking point including:
  - Signal gantries / Signalling equipment / OLE / catch pits / rail ends / third rail / discarded material etc. including when it is safe to inspect the site.
- Hazards and control measures associated with adjacent lines if on/off-tracking or operating.
- d. Lines and methods of communication,

- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the access / egress points or the on/offtracking points.

### including:

- When access route is considered unacceptable.
- Those responsible for pre-planned safe system.
- What to do if you lose sight of the Machine Controller.
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- f. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

#### **Scope of Competence**

- 1. On & Off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off-tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i. Verbal
    - ii. Written
    - iii. Hand signals
  - Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
  - Safely on/off-track the machine, negotiating any proximity hazards, confirming area is clear of personnel.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- On/off-tracking procedures include access via:
  - Lifting or driving the machine onto the track at approved access point (confirm approved manual handling techniques are used

# Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### **OTP Op Mini Tamper - Machine Operator - Mini Tamper**

# Element 3: Operate the mini tamper

#### **Performance Statements**

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

#### **Knowledge statements**

You must have knowledge and understanding of:

- a. Hazards and special precautions required when operating the mini tamper considering:
  - Track conditions
  - Safety if leaving the operating position.
- b. Lines and methods of communication.
- Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

#### Scope of Competence

### **Performance Evidence Requirements**

- 1. Operating activities are to:
  - Identify restricted zones and appropriate protection arrangements.
  - · Carry out ballast removal safely.

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# **OTP Op Mini Tamper - Machine Operator - Mini Tamper**

### **Element 4: Emergency Procedures**

#### **Performance Statements**

You must be able to:

- Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

#### Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with removal from the line.
- What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.

### **Scope of Competence**

- 1. Emergency recovery activities are to:
  - Confirm failed machine is prepared for safe removal.
  - Confirm machine is in gauge prior to manual movement along the track to removal point.
  - Propel the failed machine at a speed which is under control at all times.
  - Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
  - Confirm all loose materials are removed from the failed machine prior to removal.

### **Performance Evidence Requirements**

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

- Confirm communication is established and maintained with relevant personnel, communication is:
  - iv. Verbal
  - v. Written
  - vi. Hand signals

#### 1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Sleeper Changer.

#### 2. Scope

This competence standard applies in all circumstances where any person is required to operate the Sleeper Changer and carry out emergency procedures within a possession on Network Rail Managed Infrastructure.

The level and extent of responsibility will include their own safety and that of others who might be affected by their work. Operators will be expected to refer to others for authorisation when required. They will be responsible for adhering to the instructions and will work within set procedures and specifications.

This competence standard shall be used to assess the competence of people who are required to operate the Sleeper Changer on Network Rail Managed Infrastructure.

### 3. Competence Standard

This Competence Standard comprises four elements:

- Element 1 Carry out pre-work checks.
- Element 2 On and Off Tracking.
- Element 3 Operate the sleeper changer.
- Element 4 Emergency procedures

The first element is concerned with completion of defined pre-work checks in accordance with instructions. The second element is concerned with safe on and off tracking. The third element deals with operating the machine safely. The final element deals with procedures to be followed in emergency situations.

To prove competence in this unit, the person must also hold as a prerequisite the OTP Core module and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

#### 4. Assessment

#### 4.1 Initial Assessment

Where the activity is new to the person's area of responsibility evidence shall be used from satisfactory completion of training and mentoring and shall be gathered from the person operating a Sleeper Changer.

Where the person has been previously trained and has been completing the work for more than one year, performance evidence requirements defined in the element do not apply. The primary source of the evidence will be from detailed questioning supported by performance evidence recorded in a work experience log or other supporting documentation.

### 4.2 Re-Assessment

Re-assessment shall be completed at least every 2 years in accordance with the requirements set out in 7.3.

#### 5. Knowledge Evidence (this is common to the whole unit)

### You must have knowledge and understanding of:

- 1. What equipment certification / documentation is required.
- 2. Procedures to confirm operational and personal safety is maintained during the work.
- 3. How movement & operation of OTP may affect the safe operation of the railway.
- 4. The operating and care and control procedures applicable.
- 5. Reporting lines, communication protocols and procedures.
- 6. How the systems function under normal operating conditions.
- 7. What each of the component parts contributes to the operation of the OTP.
- 8. Terminology and methods used to identify equipment and describe the operation of the OTP.
- 9. Safe start up procedures, including checks prior to operational controls test.
- 10. When the machine horn should be sounded
- 11. Work procedures and hazards when adjacent lines are open to traffic.
- 12. What authorisation procedures are and limits of your responsibility and authority.
- 13. What procedures apply to taking the equipment out of operational service.
- 14. Types of hazards, lines and methods of communication during emergency recovery.

# OTP Op - Operate - Sleeper Changer (RMMM)

### Element 1: Carry out pre-work checks.

#### Performance statements

You must be able to:

- a. Work safely at all times, comply with health safety and relevant regulations and guidelines.
- b. Follow the relevant machine safety & prework
- c. checks in accordance with instructions.
- d. Confirm documentation required with the machine.
- e. Confirm the machine meets required operating specification and assess condition.
- f. Carry out the maintenance activities & operational controls check within the prework check.
- g. Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- h. Complete relevant records accurately and pass them on to the appropriate person.
- i. Dispose of waste materials in accordance with safe practices and approved procedures.

### Knowledge statements

You must have knowledge and understanding of:

- a. The PPE requirements of an operator.
  - b. What operator documentation is required prior to and on completion to the work.
  - c. What tests/checks must be undertaken for a complete pre-work check.

Checks include: Fluids, including engine oil, fuel, coolant, Lighting, Horn, Brakes, Wheels, Security of tow-bars, Retaining bolts, pins and clips & general fixings.

- d. The purpose of rail navigation lights.
- e. How and when machine horn is to be used.
  - f. Health & Safety features, including spillage control and fire prevention.
- g. What to do in the event of faults to the:
  - a) braking system, b) horn.
  - h. Safe start up procedures, including checks made prior to operational controls test.
  - Type and proximity of hazards including bridges / structures / location boxes / other plant etc.
- j. How to recognise when the work required exceeds operator competence limits.

### **Scope of Competence**

- Safety & pre-work checks will include checks to:
- Identify and report any faults that may

#### **Performance Evidence Requirements**

Performance evidence for initial assessment must be collected through differing types of training & workplace evidence, of the person

- affect the safety of the machine operation.
- Rail wheels including 'flange' damage 'flat spots' or 'play' in rail wheel bearings.
- Check fluid levels as appropriate.
- Check correct operation of the horn.
- Start machine correctly confirming forward and / or reverse drive is disengaged whilst check is undertaken, and area is clear of personnel and obstructions.
- Check rail navigation lights function correctly and that lenses are clean.
- Test braking system, confirming braked wheels do not rotate prior to on tracking the machine.
- Check safety & environmental features including spill kits and fire extinguishers.
- Check machine logbook entries and record results of checks & defects.
- Body panels, hatches or inspection covers are secure and replaced following checks.

completing all relevant procedures in respect of performance statements: a, b, c, d & e.

The remaining performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### Element 2: On and off tracking

#### Performance statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines
- b. Inspect the approach to the on-tracking point to confirm suitability of access.
- c. Confirm that access and egress points and on/off tracking point are approved and fit for purpose.
- d. Safely transport the machine from the stabling point to approved on-tracking point, avoiding any hazards.
- e. Carry out on & off tracking activities safely in the specified sequence and agreed time scale.
- f. Carry out an on-track brake test and confirm to relevant personnel.
- g. Carry out operational controls test, including forward and reverse controls.
- h. Report any instances where the on & off tracking activities cannot be fully met or where there are identified defects with the points of access or on/off tracking points.

#### **Scope of Competence**

- 1. On & off Tracking activities are to:
  - Inspect for suitability and determine the approved access /egress points.
  - Inspect for suitability and determine approved on/off tracking points.
  - Confirm communication is established with relevant personnel, communication is:
    - i) Verbal ii) Written iii) Hand-signals.
  - Obtain authority, confirming the line is under possession and that any traction current is isolated prior to on-tracking.
  - Safely on/off track the Machine, negotiating any proximity hazards, confirming area is clear of personnel.
  - Avoid causing any undue damage to the infrastructure whilst on/off tracking.
- 2. On/Off Tracking procedures include access via:
  - Lifting or driving the machine onto the track at approved access point (confirm approved manual handling techniques are used).

#### Knowledge statements

You must have knowledge and understanding of:

- a. Types of hazards associated with movement of the machine to the ON tracking point including:
  - Ground personnel / vehicles / man-holes / cable routes / materials and tripping hazards etc
- b. Types of hazards associated with the on/off tracking point including:
  - Signal Gantries / Signalling equipment / OLE / Catch pits / rail ends / third rail / discarded material etc including when it is safe to inspect the site.
- c. Hazards and control measures associated with adjacent lines if on/off tracking or operating.
- d. Lines and methods of communication, including:
  - When access route is considered unacceptable
  - Those responsible for pre-planned safe system
  - What to do if you lose sight of the Machine Controller
- e. Method of protection (including documentation) which must be in place prior to entering the access point.
- f. Procedure to follow prior to carrying out machine movements and why this must be adhered to.

### Performance Evidence Requirements

Performance evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, e, f and g.

All other performance statements may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training.

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

### **Element 3: Operate the Sleeper Changer**

#### Performance statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines.
- b. Confirm that the machine is set-up and ready for the activities to be carried out.
- c. Carry out operating activities to the required specification in the correct sequence and in an agreed time scale.
- d. Report any instances where requirements cannot be fully met or where there are identified defects prior to or on completion of the work.

### **Scope of Competence**

- 1. Operating activities are to:
  - Identify restricted zones and apply appropriate protection arrangements.
  - Change sleepers

#### Knowledge statements

You must have knowledge and understanding of:

- Hazards and special precautions required when operating the Sleeper Changer considering:
  - Track conditions
  - ii. Safety if leaving the operating position.
- b. Lines and methods of communication.
- Method of protection (including documentation) which must be in place prior to commencing work activities.
- d. The likely impact of your work on the operations of other departments and the impact of their work for you.

### Performance Evidence Requirements

Evidence for initial assessment must be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant procedures in respect of performance statements: a, b and c.

Performance statement 'd' may be assessed by using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training

Performance evidence for recertification assessment may be collected through differing types of workplace evidence and may include direct observation, witness testimony, completed reports of work checks, knowledge testing or a combination of the above for the person completing all relevant operating procedures.

# **Element 4: Emergency Procedures**

#### Performance statements

You must be able to:

- a. Work safely at all times, complying with health and safety and other relevant regulations and guidelines
- b. Confirm how to manually move the failed machine to the location for removal from the line.
- c. Select a suitable location to remove the failed machine from the line.
- d. Prepare and remove the failed machine from the line.
- e. Confirm the failed machine is left in a safe place, secured if unable to be removed.
- f. Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.

### **Scope of Competence**

- 1. Emergency recovery activities are to:
- Confirm failed machine is prepared for safe removal.
- Confirm machine is in gauge prior to manual movement along the track to removal point.
- Propel the failed machine at a speed which is under control at all times.
- Confirming that appropriate numbers of personnel are in attendance to undertake the removal from the line.
- Confirm all loose materials are removed from the failed machine prior to removal.
- Confirm communication is established and maintained with relevant personnel, communication is:
  - i. Verbal
  - ii. Written iii. Hand-signals

### Knowledge statements

You must have knowledge and understanding of:

- Types of hazards associated with removal from the line.
- b. What constitutes a suitable location for machine removal.
- c. Lines and methods of communication during emergency recovery.
- d. Method of protection which must be in place during emergency recovery.
- e. Method approved to remove the failed machine from the line.

### Performance Evidence Requirements

Performance evidence must be collected using a range of assessment methods including witness testimony, documented questioning, or evidence from training. Initial assessment may NOT be undertaken by the person responsible for the initial training

Performance evidence for recertification assessment may be collected through knowledge testing for the person completing emergency recovery activities.

Version Number: 2 Date: 14/05/2024

### **Amendment Status**

Version Number	Date of Change	Amended By	Amendment
Original	2015		
2	15/5/2024	Sunny Balachandran	Formatted document
2	7/7/2024	Sunny Balachandran	Removed items not on OTP Framework
2	19/7/2024	Sunny Balachandran	Updated course short codes
3	4/12/2024	Sunny Balachandran	Updated according to OTP Framework