

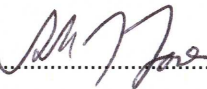
Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Level 2

Competence & Training in On Track Plant Operation

Endorsement and Authorisation

Endorsed by:



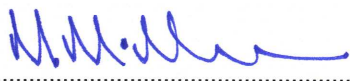
Allan J Jones, Working Group Chair

Authorised by:



Mark J Ruddy, Steering Group Chair

Accepted for issue by:



M McManus, National Standards Manager

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party without the written permission of Network Rail.

© Copyright 2008 Network Rail.

Uncontrolled copy once printed from its electronic source.

Published and Issued by Network Rail, 40 Melton Street, London NW1 2EE.



Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Issue record

Issue	Date	Comments
01	Sept 2008	First Issue

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 31 December 2010.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

Reference documentation

<u>BS7121</u>	Safe Use of Cranes
<u>CPCS</u>	Policies and Standards for CPCS Accredited Training providers
<u>GE/RT8000/OTP/S1/G1/T2/T3/T4</u>	Rule Book Module OTP (On-track Plant); S1 (Signals and Indicators Controlling Train Movements); G1 (General Safety Responsibilities); T2 (Protecting engineering work or a hand trolley on a line not under possession); T3 (Possession of the line for engineering work); T4 (Possession of a siding for engineering work).
<u>HSG47</u>	Avoiding Danger from Underground Services
<u>HSE GS 6</u>	HSE Guidance: Avoidance of danger from overhead electrical lines
<u>HSE SIM 02/2007/01 Vn2</u>	Safe use of Quick Hitch devices (TAN 01)
<u>LOLER</u>	Lifting Operations and Lifting Equipment Regulations
<u>NR/CS/CTM/001</u>	Competence Management.
<u>NR/L2/RVE/0007</u>	Specification for on and off tracking of Road-Rail Vehicles
<u>NR/L3/OPS/047/TMR01</u>	Operator Competency Standards for 360° Road-Rail Excavators & Road Rail Excavators; Issue 5 (M&EE COP 0001 Issue 5)
<u>NR/L3/OPS/047/TMC08</u>	Machine site Arrival Check (RRV and RMMM) Issue 6
<u>NR/L3/OPS/047/TMR08</u>	Tandem Lifting with two Road/Rail Cranes (M&EE COP 0008)
<u>NR/L3/OPS/048/TMM002</u>	Trailers & Attachments with RRV's and RMMM's (M&EE COP 0014 Issue 3)
<u>NR/OP/TM/R05</u>	Handling Rail & Thimbling with Road-Rail Excavators in Rail Mode (M&EE COP 0005 Issue 1)
<u>NR/OP/TM/R11</u>	Planning and Executing Lifting Operations (M&EE COP 0011 Issue 1)
<u>NR/PRC/MTC/ME/0169</u>	Monitoring of On track Plant operations
<u>NR/SP/CTM/005</u>	Quality Assurance in Training Delivery.
<u>NR/SP/CTM/006</u>	Quality Assurance in Competence Assessment.
<u>PUWER</u>	Provision and Use of Work Equipment Regulations
<u>RIS-1530-PLT</u>	Engineering Acceptance of Possession-only Rail Vehicles and Associated Equipment
<u>RIS-1700-PLT</u>	Rail Industry Standard for Safe Use of Plant for Infrastructure Work
<u>RPA</u>	Assessment specifications and guidance

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Reference documentation Cont'd

RT/LS/P/046

Network Rail Train Operations Manual

RT3170

Track Safety Handbook

CoP0019

CoP for Action to be taken in the event of accident or incident with a possession-only rail vehicle (Issue 1)

Disclaimer

In issuing this document for its stated purpose, Network Rail makes no warranties, express or implied, that compliance with all or any documents it issues is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

Supply

Copies of documents are available electronically, within Network Rail's organisation. Hard copies of this document may be available to Network Rail people on request to the relevant controlled publication distributor. Other organisations may obtain copies of this document from IHS (Technical Indexes Ltd) tel: 01344 328039.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Contents

1 Purpose	6
2 Scope	6
Table 1 – OTP Categories and Endorsements	6
3 Definitions	7
4 Requirements	10
Table 2 – Operator Pre-requisites	11
Table 3 – Minimum frequency of operation (Per 2 years) to maintain competence	14
5 Application	15
6 Assessment Strategy	15
Table 4 – Host Machines and authorised Attachments/Trailers (Guidance only)	17
Appendix A – Training Frameworks & Processes	20
Table A.1 – Operator training framework (Host Machines)	20
Table A.2 – Manufacturers Host Machines approved for training	21
Table A.3 – Operator training framework (Attachments & Trailers)	23
Appendix B – Competence Standards (Host Machines)	25
OTPO_00: Operator Core Module – Rule Book (Module OTP)	27
OTPO_01: Operate – Road Rail Excavator	33
OTPO_02: Operate – Road Rail Excavator Crane	39
OTPO_03: Operate – Crawler / Tractor Dozer	43
OTPO_04: Operate – Agricultural Tractor	49
OTPO_05: Operate – ATUV (Gator type vehicles)	55
OTPO_06: Operate – Dump Truck	61
OTPO_07: Operate – Dumper	67
OTPO_08: Operate – Highway Based Vehicle	73
OTPO_09: Operate – Motorised Trolley (RMMM)	79
OTPO_10: Operate – Self Propelled MEWP	85
OTPO_11: Operate – Telescopic handler	91
OTPO_12: Operate – Platform Lift - MEWP (RMMM)	97
OTPO_13: Operate – Ballast Packer (RMMM)	103
OTPO_14: Operate – Sleeper Changer (RMMM)	109
OTPO_15: Operate – Tracgopher (RMMM)	115
OTPO_16: Operate – Lifter / Slewler (RMMM)	121
OTPO_17: Operate – Clipper (RMMM)	127

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_18: Operate – Piling Machine	133
Appendix C – Attachment / Trailer standards	139
OTPA_00: Operator Attachment / Trailer Core Module	140
OTPA_01: Operate Attachment Access Platform Boom (MEWP)	144
OTPA_02: Operate Attachment Access Platform Scissor (MEWP)	145
OTPA_03: Operate Attachment Kb Crane	146
OTPA_04: Operate Trailer	147
OTPA_05: Operate Attachment Ballast Brush	148
OTPA_06: Operate Attachment Ballast Plough	149
OTPA_07: Operate Attachment Ballast Regulator	150
OTPA_08: Operator Attachment Chipper	151
OTPA_09: Operate Attachment Clamshell Bucket	152
OTPA_10: Operate Attachment Fast Clipper	153
OTPA_11: Operate Attachment Flail (Brush Cutter)	154
OTPA_12: Operate Attachment Flash-Butt Welder	155
OTPA_13 Operate Attachment Hydraulic Rail Beam	156
OTPA_14: Operate Attachment Hydraulic Grab	157
OTPA_15: Operate Attachment Mixer	158
OTPA_16: Operate Attachment Panel Lifting Beam	159
OTPA_17: Operate Attachment Rail Cropper	160
OTPA_18: Operate Attachment Hydraulic Sleeper Placer	161
OTPA_19: Operate Attachment Tamper	162
OTPA_20: Operate Attachment Tanker / Jetter	163
OTPA_21: Operate Attachment Thimble	164
OTPA_23: Operate Attachment Vacuum Lifter	165
OTPA_24: Operate Attachment Vacuum Unit	166
OTPA_25: Operate Attachment Piling Rig	167
OTPA_26: Tandem Lifting using On Track Plant	168
Appendix D – Flow Charts (Sentinel Route to Competence)	169

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

1 Purpose

This standard sets out the minimum requirements for the training and competence assessment of persons who operate OTP on Network Rail managed infrastructure. It defines processes that shall be implemented and the standards that shall be achieved to confirm that persons who operate OTP are competent to do so.

2 Scope

The standard applies to those who operate OTP on Network Rail managed infrastructure, within a possession. This specification covers the following types of OTP. This list and subsequent tables are NOT exhaustive and contain information which will require ongoing review.

Table 1 – OTP Categories and Endorsements

CATEGORY	ENDORSEMENT
• Core Module (host machine) • Road Rail Excavator - Tracked (RRV) • Road Rail Excavator - Wheeled (RRV) • Road Rail Excavator Crane - Tracked (RRV) • Road Rail Excavator Crane - Wheeled (RRV) • Crawler / Tractor Dozer (RRV) • Agricultural Tractor (RRV) • ATUV - Gator-type vehicles (RRV) • Dump Truck (RRV) • Dumper (RRV) • Highway Based Vehicles (RRV) • Motorised Trolley (RMMM) • Self Propelled MEWP (RRV) • Telescopic Handler (RRV) • Platform Lift - MEWP (RMMM) • Ballast Packer (RMMM) • Sleeper Changer (RMMM) • Tracgopher (RMMM) • Lifter / Slewler (RMMM) • Clipper (RMMM) • Piling-Machine (RMMM)	• Core Module (attachment) • Access Platform Boom (MEWP) • Access Platform Scissor (MEWP) • Kb Crane $\leq$ 2T swl • Kb Crane $>$ 2T swl • Trailer • Ballast Brush • Ballast Plough • Ballast Regulator • Chipper • Clamshell bucket • Fast-clipper • Flail (Brush Cutter) • Flash-butt welder • Hydraulic Rail Beam • Hydraulic Grab • Mixer • Panel Lifting Beam • Rail Cropper • Hydraulic Sleeper Placer • Tamper • Tanker / Jetter • Thimble • Vacuum Lifter • Vacuum Unit • Piling-Rig • Tandem Lifting using On Track Plant

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

3 Definitions

Assessor

Assessor is a person approved to undertake assessments of persons against the requirements of specific competence standards, as described in NR/SP/CTM/006 Quality Assurance in Competence Assessment. For the purposes of this document, shall be a registered Sentinel assessor.

Assessment

Assessment is gathering and judgement of evidence to 'prove' or 'determine' a person's competence as required by a competence standard.

ATUV

All Terrain Utility Vehicle

Authority to Work

A document that lists the differing manufacturers machine types in each category for which a competence certificate is held. It includes the details of a person's competence. It is the responsibility of the employing organisation to provide appropriate formal training and issue the Authority to Work covering the different manufacturers host machine types. Operators MUST carry this Authority to Work with them at all time when operating any host machine.

Certificate of competence

Certificate of competence confirms that specific competence has been demonstrated by an individual against the requirements of a competence standard. Certificate in the context of this specification means a Sentinel Card, detailing the On Track Plant Operators category, together with the secure counterpart detailing host machines & attachments authorised.

Competence

The ability to undertake responsibilities and to perform activities to a recognised standard on a regular basis. A combination of practical skills, experience and knowledge, and completion of work activities in accordance with agreed standards, rules and procedures.

In the context of this specification it also includes the consistent achievement of an identified standard of performance under defined normal, abnormal, and emergency situations; the ability to undertake work to confirm the safety of any person who might be affected by the work; and an appropriate level of fitness.

Competent person

A person who has been assessed as being qualified and having the required practical and theoretical knowledge, experience and skills to carry out a particular task in accordance with agreed standards, rules and procedures.

Competence Management System (CMS)

Competence Management System is a suitably resourced, logical and integrated cycle of activities within an organisation used to assure competence of those who may, through lack of competence, have a impact on the:

- Safe operation and maintenance of Network Rail managed infrastructure.
- Occupational health and safety of workers on or about the Network Rail managed infrastructure.
- Safety of other persons affected by their activities.
- Performance of Network Rail's business.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Competence Standard

Competence Standard is a statement of:

- What a person must be able to do and how well, in order to achieve the intended outcome of work.
- The range of circumstances in which the ability would have to be demonstrated.
- The knowledge required to complete the work.
- The types of evidence needed to confirm that performance is consistent and can be sustained.
- How this would be assessed.

Experienced Operator

The employing organisation shall deem an operator as experienced, this decision shall be based on previous experience, skills, competence and knowledge in operating similar or related OTP and in any case shall be not less than 12 recorded shifts (excluding mentored shifts) operating the specific item of OTP. This person can also act as a mentor.

High Rail System

The drive to the rail is by friction drive of the rail wheels by the road wheels (the road wheels are not in contact with the rails)

Kb Crane

Knuckle Boom Crane

Low Rail System

The drive to the rail is by the road wheels having direct contact with the rail.

Mentor

A 'Mentor' is an individual who accompanies or observes a newly qualified person whose skills need to be practised to consistently achieve the required standard under a variety of working conditions. The mentor confirms when the individual has operated the host machine and any attachments to the required standard and is ready for assessment.

The Mentor must:

- Hold current competence and experience or be an approved assessor / trainer in the duty and for the host machine type being mentored
- Be an experienced operator

Mentoring Period

Mentoring period is the period of time (where specified this is to be a maximum period of 4 months[#]) between the satisfactory completion of training where the person will undertake the work under mentorship in order to practice the competence and deemed ready for assessment and subsequent issue of full competence certificate and Authority to Work.

NOTE [#] Period may be extended under certain conditions, see flow chart on page 173.

Non-Rail category card holder

An operator who is competent to operate an excavator or dozer in a non-rail environment, for example CPCS card holder, or other certification scheme which is at least as rigorous.

On/Off tracking

The process of placing &/or removing road-rail vehicles from the line.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTP

On Track Plant, includes RRV's, RMMM's, Trailers and Attachments

Operation

Includes on and off tracking, working and travelling the OTP in rail mode and for certain RRV's working the OTP in road mode within the Network Rail managed infrastructure.

Person

Person means a person within the scope of this specification whose competence is assessed by an approved assessor.

Persons new to OTP operation

Those persons who have not previously undertaken work involving operation of OTP. This includes persons that may already be working in, or have worked in the rail industry before, but in another role not related to the operation of OTP. New to OTP operation is not related to grade, but to previous experience as described above.

RMMM

A rail mounted maintenance machine (RMMM) is a vehicle that can travel on rail under its own power system. Such vehicles are not allowed to operate, work or travel outside possessions. Rail in this definition refers to permanent rails intended for use by normal rail vehicles.

Road Rail Excavator crane

A machine constructed for excavation purposes that has been converted to undertake lifting duties for the rail industry.

RRV

A road-rail vehicle (RRV) is one that can travel on the road under its own power and also travel on rail by virtue of a rail wheel guidance system under its own power system. Such vehicles are not allowed to operate, work or travel on rail outside possessions.

Safety Critical Work

Work activities carried out in the railway industry that may affect the health and safety of persons on the transport system and that may have a real time impact on the operational railway. For the purposes of this specification includes all OTP operators.

Trainer

Occupationally competent person, authorised by Achilles to train OTP Operators

Verification

Verification is a process by which the quality of assessment decisions and the supporting process are independently assured, as described in NR/SP/CTM/006 Quality Assurance in Competence Assessment.

Verifier

Verifier is a person who is competent and authorised to review the assessment process and assure the completed assessment decisions against specific competence standards.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

4 Requirements

4.1 Safety of candidates undergoing training & prevention of damage to infrastructure and OTP

Before using OTP, trailers and attachments for training purposes a pre-work risk assessment shall be undertaken by the trainer to confirm that all equipment is in correct working order. Relevant in date documentation including Engineering Acceptance Certificate for host machine and where required a Product Acceptance Certificate & Statutory Inspection Certificate must be provided with the machine or attachment, the equipment shall be suitable for the activity being carried out. The risk assessment shall confirm that the track, line-side and under-track equipment including support structures will not be damaged by the use of the OTP during such training &/or assessment activities.

The trainer shall implement an approved safe system of work prior to any work commencing. There shall be sufficient numbers of appropriately qualified personnel available to provide manual handling assistance where necessary. Risk assessments shall confirm that the Manual Handling Regulations are adhered to.

4.2 Deployment.

Employers shall have processes in place which confirm that their employees and those of their contractors, required to operate OTP, trailers and attachments have been assessed as competent to undertake that work.

Employers shall not deploy any *person on the operation of OTP for any tasks associated with the operation of OTP that may have an impact on the integrity of Network Rail Infrastructure, until that person has attended and successfully completed the approved operator training course, mentorship and competence assessment. **Where a person has been trained, they may undertake the work under mentorship.*

4.3 Minimum Age

Persons to be trained to operate OTP must be at least 18 years of age.

NOTE Prior to driving any vehicle on the public highway you must be authorised in accordance with company procedures. Network Rail operators shall comply with Network Rail Road Transport Handbook.

4.4 Suitability

Employers shall have systems in place to confirm that people who operate OTP are suitable. In determining whether or not a person is suitable, employers shall have a documented and validated process in place for assessing the aptitude and attitude of any person required to operate On Track Plant. The following pre-requisites must be satisfied:

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Table 2 – Operator Pre-requisites

Role	Pre-requisite	Medical Restriction and colour vision
New operator (all machine types)	Medically fit.	Normal colour vision
Experienced operator (all machine types)	Medically fit. (a minimum of 12 shifts operating each specific item of OTP)	Normal colour vision
Road Rail Excavator Crane or Road Rail Excavator operator	Excavator (Non-Rail) category card holder	Normal colour vision
Road Rail Dozer operator	Dozer (Non-Rail) category card holder	Normal colour vision
General	• Hold current full driving licence (Not mandated for RMMM's). • The ability to give and receive clear and unambiguous communications, including both written & verbal, using the English language. • Hold a current PTS certificate endorsed AC or DC where necessary, on an electrified line. • Where candidates are required to carry out manual handling activities, they shall be trained in manual handling techniques.	

4.5 Training.

Employers shall have systems in place to identify training needs for each person in scope. A training framework and specific training modules have been developed to address the common training needs of persons in scope. Details of this framework are contained in Appendix A of this specification.

The following steps shall be used and documented to identify and satisfy specific training needs:

- Take account of specific types of OTP that the person will be required to operate and the type of activities the person will be required to undertake.
- Establish the current competence of the person, considering deployment requirements.
- Establish what development is required and therefore which training modules are appropriate to match the deployment needs.
- Agree a development plan with the person and the order in which the training should take place.
- Arrange training

4.5.1 Delivery of Training.

Persons delivering the courses listed in appendix A shall be occupationally competent, approved in accordance with the requirements of NR/SP/CTM/005 – Quality Assurance in Training Delivery & shall only use Network Rail approved training & assessment material.

For trainers to retain competence, 1 day delivering training = 1 day work experience towards the minimum frequency requirements as described in table 3 below.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

4.5.2 Facilities for training.

Training Providers shall provide training facilities which has an area of land sufficient in size and of regular shape to enable the candidate to make full use of the OTP equipment and attachments and be able to undertake practical exercises required to complete the training, assessment or test. The training, assessment and test areas must be free from contamination, overhead or underground obstruction/hazards unless they form part of the training, assessment or test requirements. There shall be a hard standing area for use by candidates of OTP, attachments and equipment familiarisation for carrying out pre-use checks, maintenance of the machine, cleaning and testing.

There shall be a serviceable track of sufficient length for travel movements to be undertaken, complete with prepared on-off tracking point(s). NWR approved training material shall state the minimum requirements for each machine / activity type. The training facility should where practicable include at least *150mm of cant and where practicable an appropriate gradient for the activity being trained, assessed or tested.

* Mentored work experience must include work on canted track, this to be recorded.

Where the candidate is required to undertake loading and unloading activities using an excavator / crane there shall be a receptacle located close by, for loading and unloading when the road rail excavator / crane is rail mounted. A suitable stockpile of material e.g. (rail ballast) for loading and unloading shall be available. There shall also be suitable facilities available for excavating, backfilling, grading, levelling terrain/materials whilst rail mounted. There shall be cones or materials to create restrictions for travelling and creating exclusion zones.

For lifting activities there shall be loads of various weights and sizes, including various lengths of rail appropriate for the size of the machine being used. Appropriate lifting accessories shall meet statutory requirements. For MEWP or Access Platform on-track operations, there shall be access points on a structure or building that allows for operation at height, additionally candidates are required to operate booms to at least 75% of their capacity.

4.6 Mentoring

Following the successful completion of training including end of course practical assessments, each person (where specified) shall undertake a period of mentorship. The detailed mentoring requirements shall be issued following attendance at the relevant training course(s). The person's employer shall appoint a mentor(s) responsible for supporting the workplace experience. The mentor(s) shall be on-site whilst the mentee is undertaking OTP Operating duties, the level of support expected of the mentor will initially be greater and can be reduced at the discretion of the mentor as the persons experience builds. Activities from group 1 in table 3 below shall include at least one single full 1:1 mentorship with mentor in the immediate vicinity of the machine at all times.

Employers shall issue a log book to be used as a record of operator experience both under mentorship and as an experienced operator.

4.7 Assessment

After successful completion of the relevant training, mentoring and assessment (see 6.1 and 6.2 below) the person shall be issued with a certificate of competence and a

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

secure counterpart against the requirements of the relevant competence standard contained in appendix B and/or C of this specification. Observations which form part of the assessment process may be conducted on-track or in a simulated environment, the environment shall comply with the criteria as specified in section 4.5.2 above 'Facilities for training'.

4.7.1 Completion of assessment.

4.7.1.1 Initial Assessment

Assessors shall NOT become involved in the 'initial assessment following training & mentorship' of the operator in the first cycle, i.e. where they were involved in the delivery of initial training.

4.7.1.2 Recertification assessment

Assessors who have been involved in the initial training of the operator are permitted to undertake recertification assessments against the competence standards detailed in this specification.

4.8 Verification

Employers shall have in place verification procedures to confirm that - at least 10% of all completed assessments are verified.

4.9 Certification.

Certification for all competences listed in Appendix B shall have a maximum validity of two years from the date of completion of assessment. Where an assessment is completed less than 8 weeks before the expiry date of an existing certificate it is permitted to use that expiry date as the starting point of the new record. Assessment may be undertaken up to a maximum of 8 weeks following certificate expiry, however the operator MUST NOT continue to operate OTP following certificate expiry unless under assessment. It is mandatory to hold a certificate of competence for the host machine, prior to certification for the use of approved attachments.

The secure counterpart shall contain relevant host machines, trailers & attachments listed in Appendices B & C and shall have a maximum validity of two years from the date of completion of assessment. Where an assessment is completed less than 8 weeks before the competence expiry date, it is permitted to use that expiry date as the starting point of the new record. Assessment may be undertaken up to a maximum of 8 weeks following competence expiry, however the operator MUST NOT continue to operate OTP using the attachments following competence expiry unless under assessment.

Persons whose duties require them to operate OTP shall carry with them whilst operating OTP a current certificate of competence including the secure counterpart and company specific Authority to Work specifying manufacturers host machine types.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Table 3 – Minimum frequency of operation (Per 2 years) to maintain competence

HOST Machine / Category	Assessment Observation Group	Minimum rail mode shifts per 2 years	Attachments and Trailers for use with host machines	Assessment Observation Group	Minimum occurrences* per 2 years
Road Rail Excavator - Tracked (RRV) Road Rail Excavator - Wheeled (RRV) Road Rail Excavator Crane - Tracked (RRV) Road Rail Excavator Crane - Wheeled (RRV) Telescopic Handler (RRV)	Group 1A Rotational Observation	24	Access Platform Boom (MEWP) / Platform Scissor Tandem Lifting using On Track Plant	Group 1A Each to be observed	24
Self Propelled MEWP (RRV) Platform Lift - MEWP (RMMM)	Group 1B Rotational Observation		Thimble Kb Crane ≤ 2T swl / Kb Crane > 2T swl Trailer (Rexquote/Chieftain/Philmor) EGO-4 trailer, EGO-5 trailer with passenger seats Gator trailer (various configurations) with hydraulic brake		12
Highway Based Vehicles (RRV) ATUV - Gator type vehicles (RRV) Motorised Trolley (RMMM)	Group 1C Rotational Observation		Piling-Rig Rail Cropper Flash-butt Welder	Group 1B Rotational Observation	
			Mixer Tanker / Jetter	Group 2 Rotational Observation	
Dumper (RRV) Crawler / Tractor Dozer (RRV) Agricultural Tractor (RRV) Dump Truck (RRV)	Group 2 Rotational Observation if RRV's <u>not</u> observed in 1A, 1B or 1C	6 Where categories 1A, 1B or 1C held Otherwise 24	Ballast Brush / Ballast Plough / Ballast Regulator Chipper / Flail (Brush Cutter) Fastclipper Clamshell bucket Hydraulic: (Rail Beam / Grab / Sleeper Placer) Panel Lifting Beam Vacuum Lifter / Vacuum unit Tamper	Group 3 Rotational Observation	6
Ballast Packer (RMMM) Sleeper Changer (RMMM) Tracgopher (RMMM) De-Clipper (RMMM) Lifter / Slewer (RMMM) Piling Machine (RMMM)	Group 3 Rotational Observation if RMMM <u>not</u> observed in 1A, 1B or 1C				

- Documented training or assessment shifts, count towards the minimum number of rail mode shifts required (to a max of 3 shifts per year)
- Rotational Observation = Where candidate holds more than a single competence from that group, they MUST be observed against alternative competences at subsequent recertification(s).
- Road Rail Excavator Crane shifts also count for Road Rail Excavator shifts, but not vice versa
- (Large) Highway Based Vehicles $\geq$ 3.5 t rail mode shifts count for (Smaller) Highway Based Vehicles < 3.5 t but not vice versa
- Kb Crane > 2T swl, occurrences count for smaller Kb Cranes (Kb Crane $\leq$ 2T swl) but not vice versa

***NOTE:**
Irrespective of the amount of times an attachment is used in a shift, it only counts as one occurrence.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

5 Application

5.1 Competence standards.

Based on an Industry & functional analysis, Competence Standards have been developed that are suitable to control the risks associated with the operation of OTP on Network Rail managed infrastructure. The Competence Standards developed to aid this process are contained in Appendix B of this specification.

In addition attachments for use with the above OTP are defined in Appendix C. See Table 5, section 6.2 (Table 5 NOT exhaustive, provided for guidance purposes).

5.2 Training needs.

A training framework and specific training modules are contained in appendix A of this specification and are directly linked to the competence standards in appendix B, shown in Appendix A Table 6.

Persons new to the operation of OTP shall be assessed against Module OTPO_00 Operator Core Module (Covering the requirements of Rule Book module OTP) regardless of what job role the person is undertaking.

6 Assessment Strategy

The strategy to be applied to assessment takes account of a number of factors:

- Whether or not the person is new to the job role
 - What training and experience a person has had.
 - What different types of machines and from which group in table 3 above, the person is required to operate.
 - The practicality of gathering observed evidence.
 - The risks from incompetent performance.
 - Frequency of re-assessment.
- a. OTPO_00 Operator Core Module, is mandatory and shall be trained and assessed prior to or together with initial, machine training & assessment for OTP operation. The Core Module need not be reassessed when other items of OTP are to be added to a persons work authorisation or Secure counterpart. The core module must remain valid whilst any host machine competence is held.
 - b. Candidates required to operate new categories of On Track Plant i.e. from a different unit of competence, Must be trained and assessed in the specific category, as per Case 1 below in section 6.1.
 - c. Candidates required to operate OTP with attachments or trailers, must hold the host machine competence prior to attachment training (Unless both form part of an initial training event). Persons must be trained / assessed for each attachment or trailer. Where competence to operate using an attachment / trailer is held for one host machine, then authority is granted to operate that attachment / trailer for all host machines where competence is held. Table 5 below provides an indication of authorised attachments for host machine groups, 'Host Machines and authorised Attachments / Trailers'. (Table 5 is NOT an exhaustive list, provided for guidance purposes only). Operators MUST confirm that the attachment is approved for use with the host machine prior to attaching to that host machine.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

6.1 Initial Assessment

Use the following approach, (only approved assessors, make assessment decisions)

Case 1

Where the work is new to the person's area of responsibility they shall:

- Attend the relevant training and complete end of training assessments (issued with certificate endorsed 'P' – (Provisional))
- Complete a period of work experience under mentorship, against objectives set at the end of the training and record the details in their Logbook. During the mentoring period the Mentor shall confirm that both his/her own safety and the safety of the person is maintained at all times in accordance with the Rule Book.
- Be assessed against the requirements laid down in the relevant Competence Standard.

NOTE Assessment will include direct observation in an On-Track or simulated environment by the assessor or may be supported by witness testimony of a competent person.

- a. If the person is competent, the assessor shall authorise the issue of a certificate of competence.
- b. If the person is not yet competent.
 1. A development action plan may be produced to provide additional development opportunities for the new operator.
 2. The person may continue workplace experience under mentorship.
 3. On completion all development actions the person shall be re-assessed for the specific competence.

Case 2

Where the person has been previously trained and operating OTP for more than 1 year they may be assessed for the specific competence using the following as the primary source of evidence. Note competence must have been practised within 12 months to permit recertification via this route.

- Detailed questioning via pre-prepared knowledge tests &
 - Report from line manager or nominated representative to confirm satisfactory and safe performance across the range of work detailed in the Competence Standard &
 - Product evidence i.e. shift records etc and log-book entries, confirming evidence of practice
- a. If the person is competent, the assessor shall authorise the issue of a certificate of competence.
 - b. If the person is not yet competent they shall be dealt with as described in Case 1.

NOTE (From table 3 above)

- Assessment will include rotational observation of Host machine Groups 1A, 1B & 1C. Direct observation of Group 2, is required where candidate has not been observed on an RRV from Groups 1A, 1B or 1C and in Group 3 where candidate has not been observed on an RMMM from Groups 1A, 1B or 1C.
- Assessment will include direct observation for all Attachments held in Group 1A.
- Observation is required for each of attachment Groups 1B, 2 & 3 on a rotation basis within each group. If 3 competences held within 1 group, each recertification will include observation of a different competence, until all have been observed, whereupon the direct observation rotation cycle is repeated.
- Direct observation may be substituted by suitable witness testimony from a competent person.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

6.2 Manufacturers Types & Category Attachments or Trailers

Where a person has been assessed as competent for a host machine and requires to operate another manufacturers machine type, from the same competence standard, the employing organisation shall arrange for formal training for the operator prior to operating the other manufacturers machine. All manufacturers machine types, where trained, shall be documented on a company specific Authority to Work document. The Authority to Work details shall include confirmation on whether the machine type is tracked or wheeled. See table 7, Appendix A, for a variety of approved manufacturers host machine types. (Table 7 is NOT an exhaustive list, provided for guidance purposes).

Table 4 – Host Machines and authorised Attachments/Trailers (Guidance only)

HOST Machine / Category	Attachments and Trailers authorised for use with host machine (List NOT exhaustive)
Road Rail Excavator – Tracked (RRV)	Flail (Brush Cutter) / Trailer (require crane operator to on-track trailer)
Road Rail Excavator – Wheeled (RRV)	
Road Rail Excavator Crane – Tracked (RRV)	Access Platform Boom (MEWP) & Platform Scissor / Ballast Brush / Ballast Plough / Clamshell bucket / Fastclip / Hydraulic Rail Beam / Hydraulic Grab / Panel Lifting Beam / Rail Cropper / Hydraulic Sleeper Placer / Tamper / Thimble / Vacuum Lifter / Piling-Rig / Vacuum unit / Trailer (Rexquote, Chieftain, Philmor)
Road Rail Excavator Crane – Wheeled (RRV)	
Crawler / Tractor Dozer (RRV)	Trailer
Agricultural Tractor (RRV)	Chipper / Flail / Trailer
ATUV - Gator type vehicles (RRV)	Trailer
Dump Truck (RRV)	Access Platform Boom (MEWP) / Access Platform Scissor (MEWP) / Kb Crane / Mixer / Vacuum unit / Trailer
Dumper (RRV)	Kb Crane / Access Platform Boom (MEWP) / Access Platform Scissor (MEWP) / Chipper / Trailer
Highway Based Vehicle < 3.5t (RRV)	Access Platform Boom (MEWP) / Access Platform Scissor (MEWP) / Trailer
Highway Based Vehicle >= 3.5t (RRV)	Access Platform Boom (MEWP) & Platform Scissor / Kb Crane / Ballast Brush / Ballast Regulator / Chipper / Flail / Scrub Cutter / Tamper / Tanker – Jetter / Trailer
Highway Based Vehicle – Flash Butt Welder	
Motorised Trolley (RMMM)	Trailer (various configurations) with hydraulic brake / EGO-4 trailer / EGO-5 trailer with passenger seats / Trailer (Lesmac, Swift etc)
Self Propelled MEWP (RRV)	Trailer
Telescopic Handler (RRV)	Access Platform Boom (MEWP) / Access Platform Scissor (MEWP) / Trailer
Platform Lift - MEWP (RMMM)	
Ballast Packer (RMMM)	
Sleeper Changer (RMMM)	
Tracgopher (RMMM)	
Lifter / Slewler (RMMM)	
Clipper (RMMM)	
Piling Machine (RMMM)	

Note: Where an approved attachment or module is fitted to a host machine, by semi-permanent, on-site or factory fitment, appropriate attachment module training shall be undertaken to cover the usage of the attachment or module in the same manner as if it were a temporary fitment.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

6.3 Maintaining Competence of Host Machines

Employers shall have systems in place to assure the continued competence of persons operating OTP. These systems shall consist as a minimum of:

- a. The use of a log book to record work experience which shall be reviewed every 9-15 months by a line manager or nominated representative to confirm the person has practised the competence within the last 12 months and at least to the minimum frequency at the end of the 2 year competence cycle, as laid out above in table 3. A record of this work experience checks, shall be maintained by the employing organisation.
- b. The implementation of a re-assessment regime that confirms, at least 2 yearly, that:
 - The work completed by the person is consistent with the requirements of the relevant competence standard
 - The person satisfactorily completes a knowledge check, defined in each competence standard knowledge specification, for each Host Machine competence held.
 - Assessment decision shall be made by an approved assessor and shall include direct observation(s) in accordance with the requirements of table 3 above. Observation under NR/PRC/MTC/ME/0169 – Monitoring of On track Plant operations may be used in lieu of the approved assessor observation. The observation may be undertaken on site or in a simulated environment, which satisfies the requirements of section 5.5.2 above.
 - Other sources of evidence may include a documented witness testimony from a competent operator.
 - There have been no incidents, accidents or near misses as a result of the person completing the work OR where the operator has been involved in any incidents, accidents or near misses, the employer will assess the operator's suitability to operate OTP considering any investigation recommendations.

Where minimum frequency of operation cannot be confirmed, additional operator development shall take place prior to the 2 yearly re-assessment to confirm suitability. Development plan(s) in lieu of minimum frequency of work experience may include mentorship or recertification training.

Where continued competence cannot be confirmed through the review / re-assessment, arrangements shall be made for the competence to be withdrawn.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

6.4 Maintaining Competence of attachments & trailers

Employers shall have systems in place to assure the continued competence of persons operating OTP with attachments / trailers. These systems shall consist as a minimum of:

- a. The use of a log book to record work experience which shall be reviewed by a line manager or nominated representative annually to confirm the person has practised the competence within the last 12 months and at least to the minimum frequency at the end of the 2 year competence cycle as laid out above in table 3.
- b. The work completed by the person is consistent with the requirements of the relevant competence standard
- c. There have been no incidents, accidents or near misses as a result of the person completing the work OR where the operator has been involved in any incidents, accidents or near misses, the employer will assess the operator's suitability to operate OTP considering any investigation recommendations.

Where minimum frequency of attachment / trailer operation cannot be confirmed, additional operator attachment/trailer development shall take place prior to the 2 yearly re-assessment to confirm suitability. Development plan(s) to restore an operators competence may include mentorship; formal recorded briefing or other development.

Where continued competence cannot be confirmed through the review / re-assessment, arrangements shall be made for the competence to be withdrawn.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Appendix A – Training Frameworks & Processes

Table A.1 – Operator training framework (Host Machines)

Competence Ref N°	Competence Standard (Host Machines)	Training Ref N°	Training Module
OTPO_00	Operator Core Module	OTPO_T0	Operator Core Module (Host Machine)
OTPO_01-T	Operate Road Rail Excavator – Tracked (RRV)	OTPO_T1.2	Operate Road Rail Excavator (Tracked)
OTPO_01-W	Operate Road Rail Excavator – Wheeled (RRV)	OTPO_T1.1	Operate Road Rail Excavator (Wheeled)
OTPO_02-T	Operate Road Rail Excavator Crane – Tracked (RRV)	OTPO_T2.2	Operate Road Rail Excavator Crane (Tracked)
OTPO_02-W	Operate Road Rail Excavator Crane – Wheeled (RRV)	OTPO_T2.1	Operate Road Rail Excavator Crane (Wheeled)
OTPO_03	Operate Crawler / Tractor Dozer (RRV)	OTPO_T3	Operate Crawler / Tractor Dozer
OTPO_04	Operate Agricultural Tractor (RRV)	OTPO_T4	Operate Agricultural Tractor
OTPO_05	Operate ATUV - Gator type vehicles (RRV)	OTPO_T5	Operate ATUV (Gator type vehicles)
OTPO_06	Operate Dump Truck (RRV)	OTPO_T6	Operate Dump Truck
OTPO_07	Operate Dumper (RRV)	OTPO_T7	Operate Dumper
OTPO_08	Operate Highway Based Vehicle (RRV)	OTPO_T8.1	Operate Highway Based Vehicles < 3.5t MPV's
		OTPO_T8.2	Operate Highway Based Vehicles >= 3.5t MPV's
OTPO_08-FBW	Operate Highway Based Vehicle – Flash Butt Welder (RRV)	OTPO_T8.3	Operate Highway Based Vehicle Flash-butt welder
OTPO_09	Operate Motorised Trolley (RMMM)	OTPO_T9	Operate Motorised Trolley (RMMM)
OTPO_10	Operate Self Propelled MEWP (RRV)	OTPO_T10	Operate Self Propelled MEWP
OTPO_11	Operate Telescopic Handler (RRV)	OTPO_T11	Operate Telescopic Handler
OTPO_12	Operate Platform Lift - MEWP (RMMM)	OTPO_T12	Operate Platform Lift - MEWP (RMMM)
OTPO_13	Operate Ballast Packer (RMMM)	OTPO_T13	Operate Ballast Packer (RMMM)
OTPO_14	Operate Sleeper Changer (RMMM)	OTPO_T14	Operate Sleeper Changer (RMMM)
OTPO_15	Operate Tracgopher (RMMM)	OTPO_T15	Operate Tracgopher (RMMM)
OTPO_16	Operate Lifter / Slewler (RMMM)	OTPO_T16	Operate Lifter / Slewler (RMMM)
OTPO_17	Operate Clipper (RMMM)	OTPO_T17	Operate Clipper (RMMM)
OTPO_18	Operate Piling Machine (RMMM)	OTPO_T18	Operate Piling Machine

Where a person requires training to develop their competence they shall attend and successfully complete the Network Rail approved OTP Operator training course.

It is mandatory to hold competence in module OTPO_00 'Operator Core Module' Prior to assessment against any Operator competence standard.

It is mandatory to hold a current, valid Non-Rail (e.g. CPCS) certificate to operate Excavators and Dozers, Prior to assessment against Competence standards:

OTPO_01 Operate Road Rail Excavator
OTPO_02 Operate Road Rail Excavator Crane
OTPO_03 Operate Crawler / Tractor Dozer

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Table A.2 – Manufacturers Host Machines approved for training
(Guidance only – List not exhaustive)

Training Ref N ^o	Training Module	Host machine(s) that may be used for Initial Training Module
OTPO_T0	Operator Core Module (Host Machine)	Operator Core Module
OTPO_T1.1 OTPO_T1.2 OTPO_T2.1 OTPO_T2.2	Operate Road Rail Excavator Tracked Operate Road Rail Excavator Wheeled Operate Road Rail Excavator Crane Tracked Operate Road Rail Excavator Crane Wheeled	Atlas 1304/1504/1604/Giga Railer
		Case 688/788/888/988 / Super/Mega Railer / WX170
		Caterpillar 206/312
		Colmar T4300/T7000/T10000
		Daewoo 130/170
		Doosan 160
		Eder 805/825
		Fiat Hitachi 85/130/135/165
		Geismar KGT
		JCB 160/175
		Marubeni Komatsu 410 (PW95)
		Komatsu PW110/PW130/PW170/228 PC128/PC138
		Liebherr 312/900/902
		Mecalac 11/12/14
		O&K 4S/5S/114
OTPO_T3	Operate Crawler / Tractor Dozer	Caterpillar D3/D4/D5 Komatsu D41
OTPO_T4	Operate Agricultural Tractor	Massey-Ferguson
		Bruff/Ford
		Lamborghini 774
		New Holland
OTPO_T5	Operate ATUV (Gator type vehicles)	John Deere Gator
		Kawasaki Mule
		KUBOTA RTV
OTPO_T6	Operate Dump Truck	JCB 712
		Philmor rail MPV
		Rail-Ability RAIL-BOSS/RAIL-RITE
		Thwaites TD12
OTPO_T7	Operate Dumper	Barford Swivel skip 5T, 6T and 8T.
		Benford swivel skip 5T and 6T.
		Benford 3-way flat bed.
		Thwaites 5T and 6T. swivel skip
		Thwaites 5T. 3-way flat bed
		Thwaites 5T. 3-way flat bed + crane
OTPO_T8.1	Operate Highway Based Vehicle < 3.5t (MPV's)	Land Rover
		Volkswagen Multi-car
OTPO_T8.2	Operate Highway Based Vehicle >= 3.5t (MPV's)	Mercedes-Benz Unimog
		Bruff / Bedford lorry
		Leyland DAF
		Newag MAN – Rocket
		SRS / Svabo 8.2Ti
OTPO_T8.3	Operate Highway Based Vehicle (Flash-butt welder)	Flash Butt welder

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Table A.2_(Cont'd) – Manufacturers Host Machines approved for training
(Guidance only – List not exhaustive)

Training Ref N ^o	Training Module	Host machine(s) that may be used for Initial Training Module
OTPO_T9	Operate Motorised Trolley (RMMM)	Bance Alumi-cart
		Geismar EGO-4
		Geismar EGO-5
		Lesmac swift
OTPO_T10	Operate Self Propelled MEWP	Ecomeca LAMA
		Genie Z45
OTPO_T11	Operate Telescopic Handler	
OTPO_T12	Operate Platform Lift - MEWP (RMMM)	Permaquip HCT
		Permaquip platform lift
OTPO_T13	Operate Ballast Packer (RMMM)	Permaquip ballast packer
OTPO_T14	Operate Sleeper Changer (RMMM)	Geismar sleeper changer
OTPO_T15	Operate Tracgopher (RMMM)	Tracgopher
OTPO_T16	Operate Lifter / Slewler (RMMM)	Permaquip muscleman
		Plasser lifter/slewler
OTPO_T17	Operate Clipper (RMMM)	Permaquip Clipper
OTPO_T18	Operate Piling Machine	Aarsleff Rail Mounted Piling Rig
		Plasser & Theurer SCPV14 Piling Machine

Copyright Network Rail

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Table A.3 – Operator training framework (Attachments & Trailers)

Competence Ref N°	Competence Standard (Attachments/Trailers)	Training Ref N°	Training Module
OTPA_00	Operator Attachment Core Module	OTPA_T0	Operator Attachment Core Module
OTPA_01	Operate Attachment Access Platform Boom (MEWP)	OTPA_T1	Operate Attachment Access Platform Boom (MEWP)
OTPA_02	Operate Attachment Access Platform Scissor (MEWP)	OTPA_T2	Operate Attachment Access Platform Scissor (MEWP)
OTPA_03	Operate Attachment Kb Crane	OTPA_T3.1	Operate Attachment Kb Crane ≤ 2T swl
		OTPA_T3.2	Operate Attachment Kb Crane > 2T swl
OTPA_04	Operate Trailer	OTPA_T4	Operate Trailer
OTPA_05	Operate Attachment Ballast Brush	OTPA_T5	Operate Attachment Ballast Brush
OTPA_06	Operate Attachment Ballast Plough	OTPA_T6	Operate Attachment Ballast Plough
OTPA_07	Operate Attachment Ballast Regulator	OTPA_T7	Operate Attachment Ballast Regulator
OTPA_08	Operate Attachment Chipper	OTPA_T8	Operate Attachment Chipper
OTPA_09	Operate Attachment Clamshell Bucket	OTPA_T9	Operate Attachment Clamshell Bucket
OTPA_10	Operate Attachment Fast-Clipper	OTPA_T10	Operate Attachment Fast-Clipper
OTPA_11	Operate Attachment Flail (Brush Cutter)	OTPA_T11	Operate Attachment Flail (Brush Cutter)
OTPA_12	Operate Attachment Flash-butt Welder	OTPA_T12	Operate Attachment Flash-butt Welder
OTPA_13	Operate Attachment Hydraulic Rail Beam	OTPA_T13	Operate Attachment Hydraulic Rail Beam
OTPA_14	Operate Attachment Hydraulic Grab	OTPA_T14	Operate Attachment Hydraulic Grab
OTPA_15	Operate Attachment Mixer	OTPA_T15	Operate Attachment Mixer
OTPA_16	Operate Attachment Panel Lifting Beam	OTPA_T16	Operate Attachment Panel Lifting Beam
OTPA_17	Operate Attachment Rail Cropper	OTPA_T17	Operate Attachment Rail Cropper
OTPA_18	Operate Attachment Hydraulic Sleeper Placer	OTPA_T18	Operate Attachment Hydraulic Sleeper Placer
OTPA_19	Operate Attachment Tamper	OTPA_T19	Operate Attachment Tamper
OTPA_20	Operate Attachment Tanker / Jetter	OTPA_T20	Operate Attachment Tanker / Jetter
OTPA_21	Operate Attachment Thimble	OTPA_T21	Operate Attachment Thimble
OTPA_23	Operate Attachment Vacuum Lifter	OTPA_T23	Operate Attachment Vacuum Lifter
OTPA_24	Operate Attachment Vacuum Unit	OTPA_T24	Operate Attachment Vacuum Unit
OTPA_25	Operate Attachment Piling Rig	OTPA_T25	Operate Attachment Piling Rig
OTPA_26	Tandem Lifting using On Track Plant	OTPA_T26	Tandem Lifting using On Track Plant

Where a person requires training to develop their competence they shall attend and successfully complete the Network Rail approved OTP Operator training courses.

It is mandatory to hold competence in the relevant Host Machine, Prior to assessment against any attachment/trailer competence standards (See table 4 above Host machines and authorised Attachments/trailers).

It is mandatory to hold competence in module OTPA_00 'Operator Attachment Core Module' Prior to assessment against any Operator attachment/trailer competence standard.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

A.1 Modules that form the OTP Training Framework (Brief overview).

Operator - Core Module

This module is designed to train persons in the operation of OTP and whose work will involve the operation of OTP. The aim of the module is to provide the basic underpinning knowledge of the Rule Book Module OTP and working methods associated with the operation of OTP.

Core module training course will cover as a minimum:

- Responsibilities affecting safety and pre-use
- Restrictions & Precautions
- Travel in a possession, within & between worksites
- Communication protocol for Operators

Operate – Host Machines as detailed in Table A.1 above

The training modules are designed to provide the basic underpinning knowledge of and working methods associated with the operation of the host machine(s).

Training will include theory sessions augmented with practical work by the On Track Plant trainee, operating the host machine in a controlled environment, whilst at all times working to the instructions of an approved trainer.

Host machine training courses will cover as a minimum:

- Carry out pre-work checks
- On & Off tracking
- Operate the Host Machine safely
- Emergency procedures

Operate – On Track Plant with Attachments or Trailers

Each attachment module is designed to train persons who hold a host machine competence and are required to operate the host machine with an approved attachment / trailer. Each module will provide the basic underpinning knowledge of and working methods associated with the operation of the host machine / activity using the specific attachment or trailer.

Training will include theory sessions augmented with practical work by the On Track Plant trainee, operating the machine with attachment / trailer in a controlled environment, whilst at all times working to the instructions of an approved trainer.

Core Attachment / Trailer training course will cover as a minimum:

- Carry out pre-work checks
- Operate the OTP with attachments / trailers safely

Specific Attachment / Trailer training courses (As detailed in table A.3 above) will cover as a minimum:

- Items unique to the operation of the OTP with the specific attachment / trailer or process safely. Building on the core module with theory and practical sessions specific to that attachment / trailer or process.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

Appendix 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 the risks associated with competent performance of people who are operating OTP on Network Rail managed infrastructure.

B.1.1 Operators OTP Category

Relevant to all people operating On Track Plant on Network Rail managed infrastructure.

OTPO_00 Operator Core Module
OTPO_01-T Operate Road Rail Excavator - Tracked (RRV)
OTPO_01-W Operate Road Rail Excavator - Wheeled (RRV)
OTPO_02-T Operate Road Rail Excavator Crane – Tracked (RRV)
OTPO_02-W Operate Road Rail Excavator Crane – Wheeled (RRV)
OTPO_03 Operate Crawler / Tractor Dozer (RRV)
OTPO_04 Operate Agricultural Tractor (RRV)
OTPO_05 Operate ATUV - Gator type vehicles (RRV)
OTPO_06 Operate Dump Truck (RRV)
OTPO_07 Operate Dumper (RRV)
OTPO_08 Operate Highway Based Vehicle (RRV)
OTPO_08-FBW Operate Highway Based Vehicle – Flash Butt Welder (RRV)
OTPO_09 Operate Motorised Trolley (RMMM)
OTPO_10 Operate Self Propelled MEWP (RRV)
OTPO_11 Operate Telescopic Handler (RRV)
OTPO_12 Operate Platform Lift - MEWP (RMMM)
OTPO_13 Operate Ballast Packer (RMMM)
OTPO_14 Operate Sleeper Changer (RMMM)
OTPO_15 Operate Tracgopher (RMMM)
OTPO_16 Operate Lifter / Slewler (RMMM)
OTPO_17 Operate Clipper (RMMM)
OTPO_18 Operate Piling Machine (RMMM)

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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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:

- Evidence of the way the person carried out activities – evidence of the process involved in demonstrating competence. This takes the form of observation, authenticated log book entries, or performance reports.
- Products of the person's work – items that the person produces or works on or documents produced as part of the 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 that 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 & 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 Acceptance 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_00: Operator Core Module – Rule Book (Module OTP)

1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate On Track Plant, and cover the requirements as detailed in GE/RT8000/OTP.

2. Scope

This competence standard applies in all circumstances where any person is required to operate On Track Plant 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, and 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 On Track Plant on Network Rail managed infrastructure.

3. Competence Standard

This Competence Standard comprises four elements:

- Element 1 Responsibilities affecting safety and pre-use
- Element 2 Restrictions & Precautions
- Element 3 Travel in a possession, within and between worksites
- Element 4 Communication Protocol for Operators

The first element is concerned with understanding and demonstrating operator responsibilities. The second element is concerned with rules and procedures affecting restrictions and precautions to be taken by operators. The third element deals with rules and procedures for travelling within a worksite, and within a possession including travelling without a Machine Controller present. The final element deals with protocol & procedures affecting verbal, written and hand-signal communication.

To prove competence in this unit, the person must be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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 the OTP.

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. The relevant sections of the Rule Book GE/RT 8000
2. The responsibilities and competence requirements of the operator and the machine controller
3. How the machine controller is identified and when they are required to be present
4. How a crane controller is identified and when they are required to be present
5. The emergency equipment that is required and how to use it
6. The equipment that must be tested as a minimum on all OTP
7. The requirements that must be met before the OTP can be placed on or removed from the line including the isolation and protection arrangements
8. Using OTP on electrified lines
9. Specific precautions regarding restrictions associated with OTP
10. Personal safety regarding riding on OTP or vehicles, coupling and uncoupling, and dealing with brake couplings
11. How to undertake travel movements within a worksite and within a possession
12. The conditions for, and how to undertake travel movements without a machine controller present including the movement of more than one item of OTP at the same time
13. Communications including radio and hand signals that will be used
14. Signs and signals and that may be encountered
15. The content of the briefing that the operator will receive from the machine controller
16. Requirements when stabling or leaving OTP unattended
17. Actions in the event of a derailment
18. Negotiating points and crossings
19. Defect reporting
20. The limits of the operator's responsibility

Copyright Network Rail

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_00: On Track Plant Core	
Element 1: Responsibilities affecting safety and pre-use	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations, specifications and guidelines. - Identify the PPE requirements when operating OTP - Identify limits of own competence - Identify when a Machine Controller is required - Identify when a Crane Controller is required - Identify the emergency equipment that must be with the OTP at all times - Identify the minimum documentation required to be with the OTP - Identify the minimum checks/tests of the OTP, that must be carried out before use - Identify the required protection/isolation arrangements required where OTP is to be on tracked, off tracked, travelled and worked.	Knowledge statements <i>You must have knowledge and understanding of:</i> - The PPE requirements of an operator. - Where the Rule Book GE/RT8000 Module OTP applies - When a Machine or Crane Controller must be appointed, how to identify him/her and requirements for MC briefing. - What emergency equipment must be available - The minimum checks of the OTP that must be carried out before use - The reporting procedure for any defects - When OTP is allowed to on or off track including the required protection/isolation arrangements and restrictions in areas where the traction power supply is through; - Conductor rails - OLE (Overhead Line Equipment) - The documentation required to be: - Completed prior to on tracking - Shown to the MC e.g., EAC
Scope of Competence - The emergency equipment includes: - At least 10 detonators - Two track circuit operating clips - A red flag - A hand lamp (which must be able to show a red aspect) - A fire extinguisher - A Spill kit - Documents include: - Engineering acceptance certificate - OTP inspection log/sheet - Recording results of checks and notification of identified defects - Checks include; - Head side and tail lights - Brakes - Horn - Movement Limiting devices - Required Protection/isolation includes; - T3, T4 Possessions - T2 Protection - Isolation of OLE and conductor rails	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 all performance statements. 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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_00: On Track Plant Core	
Element 2: Restrictions and Precautions	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations, procedures and guidelines - Identify the reason why the machine controller needs to see the OTP's EAC - Identify the method of attaching/detaching other vehicles to/from the OTP - Identify the correct method of moving other vehicles with the OTP - Identify the procedure for dealing with a vehicle with defective brakes - Identify your responsibilities regarding the prevention of impacts - Identify the procedure for Entering a shed or building - Identify travel speed - Identify the requirements for transiting over level crossings	Knowledge statements <i>You must have knowledge and understanding of:</i> - The general content described in an EAC and limitations to use - The equipment that is required to be used to attach the OTP to another vehicle when towing or propelling - The method of attaching and detaching vehicles - The procedure for dealing with a vehicle with defective brakes - Responsibility to operate OTP correctly to avoid impacts - the procedure when entering a shed or building - Speed of OTP movements; - In a worksite - Between worksites - Over points, crossings or in sidings - Stopping distance, you must be able to stop in the distance you can see to be clear of any obstruction
Scope of Competence - Reasons why EAC needs to be shown include; - Expiry date - Cant and gradient information - On/Off tracking requirements - Towing/propelling capabilities - Travel speeds - Requirements regarding adjacent lines - Attachments that can be used - Restrictions - Registered for road usage - Relevant procedures includes: - When to On/Off track the OTP on a running line or siding.	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 all performance statements. 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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_00: On Track Plant Core	
Element 3: Travel in a possession, within and between worksites	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations and guidelines. - Maintain documentation in accordance with operator requirements. - Undertake operating activities for travel to / from a worksite, following operating procedures and processes at all times. - Interpret and obey all signals authorising movement within a possession and understand when signals may be passed whilst displaying a stop aspect.. - Confirm that all worksite limits are understood and understand authorisation procedures when required to pass worksite marker boards. - Identify personnel in charge of all areas within a possession, and specify their role. - Confirm the conditions for travelling without a machine controller. - Confirm the conditions to be satisfied for making multiple movements - Adhere to the requirements for transiting over level crossings	Knowledge statements <i>You must have knowledge and understanding of:</i> - Regulations, guidelines and operating procedures to be followed when; - Travelling to a worksite - Making a machine movement - Access route is unacceptable - Using low, high and hydrostatic rail machines - Travelling without a Machine Controller & the conditions which must first be satisfied - Making multiple movements & the conditions which must first be satisfied and maintained - When working on a gradient - Using on-board colour display CCTV - The purpose and identification of signals, worksite marker boards and possession limits. - When stop signals and worksite marker boards (on entry / exit to a worksite) may be passed. - Maximum speed of travel within and outwith a worksite and situations which require reduced speed - Lines and methods of communication, including: - Reaching a clear understanding of work, and obtain authority prior to making, movements including those whilst transiting over level crossings - Situations where access route is unacceptable - Situations where rail movements are required and limited sighting is available - Content of Machine Controller briefing - The likely impact of your work on the operations of other departments and the impact of their work
Scope of Competence - Operating activities include obtaining authority: - Prior to entering & move within a possession - Making any rail movement - When a level crossing is encountered - Operating procedures include: - Placing the machine in the correct configuration before commencing travel: - Machine facing direction of travel - Navigation lights set for direction of travel - When in travel mode: - Keep Machine in gauge - Adhere to speed restrictions - Maintain observation all round - Observe safe braking distances - Correct use of horn prior to & during travel - Reduce speed on approach to point-work, crossings & worksites - Check points set for direction of travel - Stop at worksite marker boards	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 all performance statements. 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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_00: On Track Plant Core

Element 4: Communication Protocol for Operators

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. Make movements when controlled by radio and take suitable precautions when radio contact is lost.
- c. Use the phonetic alphabet, and use correct communication protocols when using two-way radio.
- d. Respond to emergency stop warnings
- e. Confirm communication is established and maintained with relevant personnel including communication methods where there is not a clear view ahead

Scope of Competence

1. Communication is:
 - i. Verbal
 - o Face to face
 - o Radio
 - ii. Written
 - iii. Handsignals (Where required)
 - o For OTP Rail movements
 - o For OTP Operation

Knowledge statements

You must have knowledge and understanding of:

1. Lines and methods of communication during emergency recovery.
2. Rules to be followed when radio contact is broken with person controlling machine
3. The full phonetic alphabet and when to use including method of reciting numbers.
4. Emergency stop messages and how to recognise and react on hearing this message.

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 all performance statements.

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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_01: Operate – Road Rail Excavator

1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate Road Rail Excavator (tracked & wheeled) and Road Rail Excavator Crane (tracked & wheeled).

2. Scope

This competence standard applies in all circumstances where any person is required to operate the excavator and Road Rail Excavator tracked & wheeled, & 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 Road Rail 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 be assessed as competent in unit of competence 'OTPO Core' and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

Copyright Network Rail
Provided by IHS under license with Network Rail
No reproduction or networking permitted without license from IHS

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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 Road Rail 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

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, other vehicles and ground personnel.
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.

Copyright Network Rail

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_01: Operate Road Rail - Excavator	
Element 1: Carry out pre-work checks.	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations and guidelines. - Follow the relevant machine safety & pre-work checks in accordance with instructions. - Confirm that the host machine can operate with lifting equipment or quick hitch - Confirm the documentation which is required with the machine. - Confirm that the machine meets the required operating specification and assess the condition. - Carry out the maintenance activities within the limits of the pre-work check. - Identify & report any instances where the required specification cannot be fully met or where there are identified defects. - Complete relevant pre-work check records accurately and pass them on to the appropriate person. - Dispose of waste materials in accordance with safe working practices and approved procedures.	Knowledge statements <i>You must have knowledge and understanding of:</i> - What the PPE requirements of an operator are. - What operator documentation is required prior to and on completion of the work. - Type and proximity of hazards including: signal gantries, structures, line side fixtures, lines open to traffic, other vehicles and ground personnel - The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode - What type of defects can occur and how to check for these, including braking system & horn. - 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 tow-bars, doors, retaining bolts, pins and clips, hydraulic hoses & general fixings. - 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 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. - 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 & slew limiters - Test all braking systems in road mode. - Check compatibility of machine, equipment & attachments - Check required documentation, 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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_01: Operate Road Rail - Excavator	
Element 2: On and off tracking	
Performance statements <i>You must be able to:</i> - 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. - Confirm that on and off tracking points are approved and fit for purpose. - Carry out on & off tracking activities in the specified sequence and in an agreed time scale, using horn to warn of movements. - 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. - Carry out an ON Track brake test and confirm to relevant personnel.	Knowledge statements <i>You must have knowledge and understanding of:</i> - 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 etc - 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. - Lines and methods of communication, including: - Situations where access route is found to be unacceptable. - Personnel responsible for the pre-planned 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 - 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: - Verbal - Written - Handsignals - 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 - 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_01: Operate Road Rail - Excavator

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.
- Confirm that buried services procedures are undertaken prior to operating the machine.
- Carry out operating activities to the required specification in the correct sequence and in an agreed time 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.

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
 - Confirm correct attachment to host machine
 - 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:
 - verbal
 - Handsignals

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 manufacturers instructions for host machine, lifting accessories and quick hitches

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.
- Method of protection (including documentation) which must be in place prior to commencing excavations.
- Operating & manufacturers requirements & instructions applicable to the safe use of host machine, equipment & attachments.
- Method for confirming compatibility of the lifting accessory or quick hitch with the lifting equipment
- Able to differentiate between quick hitches as a lifting accessory &/or lifting equipment.
 - Approved method of using quick hitches or lifting accessories
- Types of bucket required for the task.
- Work procedures and hazards associated with adjacent lines, where open to traffic.
- 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.
- Regulations, guidelines and operating procedures for; motion restriction systems; offset booms; effects of cant on machine stability & buried services.

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 e. 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_01: Operate Road Rail - Excavator	
Element 4: Emergency Procedures	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations and guidelines - Confirm how to safely prepare a failed machine for emergency recovery. - Confirm the requirements of the towing vehicle prior to emergency recovery activities. - Carry out emergency activities in the specified sequence. - Deal promptly and effectively with problems within your control and report any instances where the emergency activities cannot be fully met.	Knowledge statements <i>You must have knowledge and understanding of:</i> - Types of hazards associated with emergency recovery. - Lines and methods of communication during emergency recovery. - Auxiliary systems, including release of brakes. - Towing vehicle, including certification requirements and maximum allowable towing weight. - Method approved to connect the towing machine to the failed machine. - Maximum speed at which towing vehicle may travel whilst towing failed machine - 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 - 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: - Verbal - Written - Handsignals - 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 height - axle stabilisers are in the unlocked position - 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_02: Operate – Road Rail Excavator Crane

1. Purpose

The purpose of this competence standard is to define the competence requirements for persons required to operate a Road Rail 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 two elements:

Element 1 Carry out pre-work checks.

Element 2 Operate the OTP Road Rail Excavator Crane

The first element is concerned with completion of defined pre-work checks in accordance with instructions.. The second element deals with operating the machine safely.

To prove competence in this unit, the person must also be assessed as competent in units of competence 'OTPO Core' and OTPO 1 Operate Road Rail Excavator, and be able to demonstrate their ability to complete elements one and two and show they can follow recording, reporting and escalation procedures.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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 Road Rail 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.

Copyright Network Rail

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_02: Operate Road Rail – Excavator Crane

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 & pre-work checks in accordance with instructions.
- Confirm the documentation which is required with the machine.
- Confirm that the machine meets the required operating specification and assess the condition.
- Confirm that the equipment & attachments are correctly attached to the host machine
- Carry out the maintenance activities within the limits of the pre-work check.
- Identify & report any instances where the required specification cannot be fully met or where there are identified defects.
- Complete relevant pre-work check records accurately and pass them on to the appropriate person.

Scope of Competence

- Safety and pre-work checks will include:
 - Identify any faults that may affect the safety of the machine operation for lifting duties.
 - Check compatibility of machine, equipment and attachments.
 - Check the RCI functions correctly including;
 - Audible warnings
 - Visual warnings
 - Comparison with duty charts
 - Motion restriction system
 - Check the lifting accessories, including lifting points on the machine to confirm;
 - In date for inspection
 - No defects are apparent
 - Correctly labelled/tagged
 - Appropriate for the lifting duties to be performed
 - Check currency of required documentation.
 - Check machine type, equipment, attachments are as stated on the Work Package Plan (Method Statement)
 - Record results of checks and report identified defects to the appropriate person.

Knowledge statements

You must have knowledge and understanding of:

- What operator documentation is required prior to and on completion to the work.
- What types of defect can occur and how to check for these defects.
- Lifting Operations and Lifting Equipment Regulations (LOLER) 1998
- Maximum frequency between statutory inspections.
- The difference between Lift & Carry and Non-Lift & Carry RCI's. Requirement to de-rate Non-Lift & Carry RCI for Lift & Carry operations, stating de-rating value.
- What tests/checks must be undertaken for a pre-work check of the RCI.
- What pre-use checks must be undertaken of the machine lifting points.
- What pre-use checks must be undertaken of un-powered lifting accessories
- Limits of the operator competence.

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

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_02: Operate Road Rail – Excavator Crane

Element 2: Operate the Road Rail Excavator Crane

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.
- Operate the host machine, equipment and attachments in accordance with manufacturers instructions
- Carry out lifting activities to the required specification in the correct sequence and in 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.

Scope of Competence

1. Operating activities are to:

- Select appropriate un-powered lifting accessories for the work including;

Camlocks, Chains, Slings, Shackles, Un-powered lifting beams for sleepers and rails

- Confirm loads are slung correctly including trial lift to avoid;

Unbalanced loads, Loads slipping or becoming detached, Damage to the load or the lifting accessories, Long loads swinging out of control

- Work within the machines lifting capabilities, monitoring and re-acting to the RCI
- Confirm machine remains stable at all times, and operating the machine smoothly, minimising load swing.
- Place loads where instructed by the Crane Controller
- Confirm communication is maintained with the Crane Controller, communication is:
 - verbal
 - Handsignals (BS7121) as in OTP

2. Operating procedures, in accordance with host machine, equipment & attachment manufacturers instructions, are:

- Lift and carry (in rail and road mode)
- Static lift
- Level rail & cants (including high and low side)
- Reversing movements with a load
- Stacking loads (rails, sleepers)
- Confirm the whereabouts of obstructions, cables or other services prior to undertaking the work
- Identify restricted zones & protection arrangements
- Work adjacent to lines open to rail movements, including when trains approach
- Set motion restriction systems, including the RCI
- Setting the RCI for the appropriate lift duty in accordance with duty chart for host machine.
- Estimation of load weight

Knowledge statements

You must have knowledge and understanding of:

- Types and uses of un-powered lifting accessories associated with lifting operations within the railway environment, checks required before use, and certification required.
- Estimation of weights of loads to be lifted
- Reading duty charts in association with the work
- Checks to be made of the RCI before use
- Requirement to monitor the RCI during lifting operations and what action to take if the machine approaches maximum SWL.
- Requirements to raise load slightly off the ground before lifting operations
- The circumstances when the SWL of a chain or sling requires to be reduced.
- Problems caused by over-angling a sling during use.
- Potential problems associated with long loads and how to control them.
- Special precautions when lifting in areas of cants or gradients including knowledge of SWL when working on canted track.
- Special precautions when undertaking slewing, lifting or operations on canted track
- Lines and methods of communication, including:
 - Handsignals for lifting (BS7121)
 - Situations where requests made by the client regarding the work are found to be unacceptable.
 - Responsibilities of the operator, crane controller, and slinger.
- Documentation which must be in place prior to commencing lifting operations, e.g., lifting plan
- Actions in the event of RCI breakdown during the course of the work.
- Work procedures and hazards associated with adjacent lines, where open to traffic.
- The likely impact of your work on the operations of other departments & the impact of their work for you.

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 c. for applicable items in scope statement 1 & 2.

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

Performance evidence for recertification assessment may be collected through differing types of evidence.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_03: Operate – Crawler / Tractor Dozer

1. Purpose

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 be assessed as competent in unit of competence 'OTPO Core' and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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

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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_03:Operate OTP - Crawler / Tractor Dozer	
Element 1: Carry out pre-work checks.	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations and guidelines. - Follow the relevant machine safety & pre-work checks in accordance with instructions. - Confirm the documentation which is required with the machine. - Confirm that the machine meets the required operating specification and assess the condition. - Carry out the maintenance activities within the limits of the pre-work check. - Identify & report any instances where the required specification cannot be fully met or where there are identified defects. - Complete relevant pre-work check records accurately and pass them on to the appropriate person. - Dispose of waste materials in accordance with safe working practices and approved procedures.	Knowledge statements <i>You must have knowledge and understanding of:</i> - What the PPE requirements of an operator are. - What operator documentation is required prior to and on completion of the work. - Type and proximity of hazards including: signal gantries, structures, line side fixtures, lines open to traffic, other vehicles and ground personnel - The purpose of rail navigation lights, and why road lights and amber flashing beacons are required to be turned off when in rail mode - What types of defect can occur and how to check for these defects. - What to do in the event of faults to the: - braking system & b) horn. - 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. - 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. - 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	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 combination of the above for the person completing all relevant operating procedures

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTP_03: Operate - Crawler / Tractor Dozer

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
- Identify the approved method of travelling from the stabling point to the access point, confirm suitability, size of route and proximity hazards.
- Confirm that access and egress points are approved and fit for purpose.
- Travel from the stabling point to approved on-tracking point, avoiding any hazards.
- Carry out on & off tracking activities in the specified sequence and in an agreed time scale. Use horn to warn of movements.
- 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.
- Carry out an ON Track brake test and confirm to relevant personnel
- Confirm that the machine is in the correct configuration for travel following on tracking

Scope of Competence

- 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:
 - Verbal
 - Written
 - Handsignals
 - 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
 - Safely OFF Track the Machine
- 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

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
- Types of hazards associated with the On/Off tracking point including:
 - Signal Gentries / Signalling equipment / high / low ballast shoulder / 3rd or 4th rail etc including when it is safe to inspect the site.
- 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.
- Types of hazards associated with adjacent lines open to traffic, when operating or on/of tracking.
- Procedure to follow prior to carrying out machine movements

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 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_03: Operate - Crawler / Tractor Dozer	
Element 3: Operate the Road Rail Crawler / Tractor Dozer safely	
Performance statements <i>You must be able to:</i> - 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. - Confirm that buried services procedures are undertaken prior to operating the machine. - Carry out operating activities to the required specification in the correct sequence and in an agreed time scale. - 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 <i>You must have knowledge and understanding of:</i> - Types of hazards and special precautions required when operating the machine adjacent to structures or the railway line. - Lines and methods of communication, including: - Personnel responsible for buried services check and method of confirming, approval to begin excavations. - Regulations, guidelines and operating procedures in areas of buried services. - Method of protection (including documentation) which must be in place prior to commencing excavations reinstatement. - 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.

Copyright Network Rail

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO 3: Operate - Crawler / Tractor Dozer	
Element 4: Emergency Procedures	
Performance statements <i>You must be able to:</i> - Work safely at all times, complying with health and safety and other relevant regulations and guidelines - Confirm how to safely prepare a failed machine for emergency recovery. - Confirm the requirements of the towing vehicle prior to emergency recovery activities. - Carry out emergency towing activities in the specified sequence. - Deal promptly and effectively with problems within your control and report any instances where the emergency recovery activities cannot be fully met.	Knowledge statements <i>You must have knowledge and understanding of:</i> - Types of hazards associated with emergency recovery. - Lines and methods of communication during emergency recovery. - Auxiliary systems, including release of brakes. - Towing vehicle, including certification requirements and maximum allowable towing weight. - Method approved to connect the towing machine to the failed machine. - Maximum speed at which towing vehicle may travel whilst towing failed machine - 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 - 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: - Verbal - Written - Handsignals - For the failed machine, confirm that the machine: - Is in gauge - Emergency brake release system is operated - 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.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

OTPO_04: Operate – Agricultural Tractor

1. Purpose

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

2. Scope

This competence standard applies in all circumstances where any person is required to operate the Agricultural Tractor, & 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 Agricultural Tractor 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 Agricultural Tractor 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 unit of competence 'OTPO Core' and be able to demonstrate their ability to complete elements one to four and show they can follow recording, reporting and escalation procedures.

Ref:	NR/L2/CTM/025
Issue:	01
Date:	01 September 2008
Compliance date:	31 December 2010

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 Agricultural Tractor.

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. 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.