# Operate plant and machinery in the Tramway environment



#### **Overview**

This standard is about operating plant and machinery in the Tramway environment. It is about being able to prepare the plant and machinery for use and ensuring that the surrounding area is protected from damage. You will be able to operate a wide range of plant and machinery safely and with consideration to the stakeholders and operational constraints found in the Tramway environment. You will be able to close down the plant and machinery after work activities and ensure that they are safely stored and secure. You will know and understand how the use of plant and machinery can affect stakeholders and the ways in which this can be reduced.

This standard is for those who work in the Tramway engineering and construction environment.

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# Performance criteria

You must be able to:	P1	complete preparation activities on plant and machinery
	P2	protect the work and surrounding area from damage or interference
	P3	agree and use appropriate <b>communication techniques</b> whilst using plant and machinery
	P4	operate and manoeuvre plant and machinery in the Tramway environment
	P5	return plant and machinery to a safe operational state upon completion of work activities
	P6	close down, clean and secure plant and machinery after use
	P7	carry out <b>maintenance activities</b> to plant and machinery within the limits of own authority

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## Knowledge and understanding

You need to know and understand:

- K1 the legal and organisational requirements relating to the use of plant and machinery in the Tramway environment
- K2 how the use of plant and machinery can **affect stakeholders** and the **surrounding environment**
- K3 the methods and techniques for reducing the effect of operational plant and machinery on stakeholders
- K4 the **operational constraints** to be considered whilst operating plant and machinery in the Tramway environment
- K5 the **information and documentation** required prior to activities taking place
- K6 the **risks** associated with using plant and machinery
- K7 the principles of protection in the Tramway environment and the methods used
- K8 the importance of clear and effective communication whilst operating plant and machinery
- K9 how to configure plant and machinery using information relating to the work activities
- K10 how to hand over plant and machinery to the control of others
- K11 the importance of storing and securing plant and machinery when not in use

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#### **Additional Information**

# Scope related to performance criteria

- P1 **Preparation activities** may include; accessing, conducting operational/functional/safety checks, manoeuvring, positioning, setting up, configuring, starting. **Plant and machinery** may include; ancillary equipment, generators, roller dumper, forklift, telehandler, MEWP, ironman, cembre drills, tampering tools, palfinger crane, trilety rail cleaner, elevating work platform, snow plough, winch, cable drum carrier, MEWP's, mixers, compressors, self-powered tools.
- P3 **Communication techniques** may include; hand/arm movements and signals, two-way radio.
- P7 **Maintenance activities** may include; replacing bulbs/fuses, checking, replenishing and replacing fuel/lubricants/fluids/coolants, cleaning parts/components, securing nuts/bolts, aligning and calibrating, changing consumable items.

# Scope related to knowledge criteria

- K2 **Affect** may include; loud noise, bright lights, dust, vibration, air pollution, chemicals/water pollution. **Stakeholders** may include; pedestrians, road users, businesses, landowners, councils, general public, emergency services, transport operators, passengers, customers. **Surrounding environment** may include; grade II listed buildings, pedestrianised areas.
- K4 **Operational constraints may include;** restricted access/space, open working, weather conditions, day/night working, clearances, slopes, inclines, uneven terrain, restricted noise/vibration levels, iron works, utilities access, obstacles, load characteristics.
- K5 **Information and documentation** may include; risk assessment, licence, permits, safety certificates, method statements, manufacturers manual/information/specification.
- K6 **Risks** may include those associated with; self, the team, the general public, surrounding businesses, overhead and underground services.

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#### **Additional Information**

#### **Glossary**

#### **Tramway**

Includes the tramway (a set of rails, switches and crossings which form the route of a Tram), infrastructure (fixed assets used for the running of the Tram transport system, including, the tramway, bridges, tunnels, stops, stations and fixed equipment for signalling, communications and electrification), depots, stabling yards.

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Developed by	UK Tram	
Version number	1	
Date approved		
Indicative review date		
Validity	Current	
Status	Original	
Originating organisation	New NOS	
Original URN	New	
Relevant occupations	Transport Operations and Maintenance	
Suite	Tramway Engineering	
Key words	Tram, Tramway, plant, machinery	