
Overview

This standard is about using traffic management technology to manage traffic on inter-urban roads, including motorways and all purpose trunk roads. It includes addressing traffic flow in response to incidents, congestion and the effect of roadworks. It requires the use of the technology to monitor the roads, to set the signs and signals and also the ongoing reviewing of the situation so that the settings can be altered accordingly.

There are three elements

- 1 Manage incidents on inter-urban roads using traffic management technology
- 2 Manage congestion on inter-urban roads using traffic management technology
- 3 Manage traffic flow through roadworks on inter-urban roads using traffic management technology

Performance criteria

You must be able to:

Manage incidents on inter-urban roads using traffic management technology

- P1 identify correctly and respond promptly to incidents which require traffic management
- P2 establish the nature of the incident and determine correctly the response required, taking into account the location of the incident and whether it is a high or low risk location, the traffic count and weather conditions
- P3 relate accurately the relevant geographic addresses identified on the electronic systems to actual distances on the inter-urban road network
- P4 identify correctly the relevant signs and signals for managing the incident
- P5 demonstrate that the proposed settings are appropriate and safe for road users
- P6 set signs and signals in a timely manner, and in line with organisational procedures
- P7 monitor the incident and assess further relevant, available information, altering the traffic management settings accordingly, in line with your organisation's procedures
- P8 provide relevant and accurate information promptly to the relevant person(s) regarding incidents, including any likely reduction in network capacity, in line with your organisation's procedures
- P9 clear signs and signals correctly and promptly following the resolution of incidents
- P10 maintain up to date, accurate and complete incident records

Manage congestion on inter-urban roads using traffic management technology

You must be able to:

- P11 monitor the inter-urban road network using CCTV in line with your organisation's procedures
- P12 monitor automatic traffic management detection and signalling systems, and respond promptly to indications of congestion on inter-urban roads
- P13 identify the cause of congestion promptly and respond correctly, in line with your organisation's procedures
- P14 review the automatic settings, amending these correctly in response to changes in the situation and associated congestion levels
- P15 identify accurately the extent of the congestion, and its impact across the inter-urban road network, and set signs and signals manually to minimise the effect of the congestion upon road users
- P16 monitor the congestion and assess further available information, altering the traffic management settings accordingly
- P17 provide accurate information to the relevant person(s) regarding any likely reduction in network capacity, and also when capacity will be restored, in line with your organisation's procedures

SFJJA301

Manage inter-urban traffic using traffic management technology

- P18 clear signs and signals correctly and promptly following restoration of the inter-urban road network capacity
- P19 identify correctly any faults in the traffic management detection and signalling systems and report these promptly to the relevant person, in line with your organisation's procedures
- P20 maintain up to date, accurate and complete records

Manage traffic flow through roadworks on inter-urban roads using traffic management technology

You must be able to:

- P21 identify roadworks scheduled for the inter-urban road network, in line with your organisation's procedures
- P22 communicate with the roadworks contractor and identify correctly all relevant information necessary for managing traffic flow through the effected location
- P23 identify and set correctly the relevant signs and signals for the roadworks
- P24 set correctly the highest displayable speed limit on relevant signs, in accordance with any mandatory speed limits, where appropriate
- P25 enable and disable correctly high occupancy on electronic detection and automatic signalling system sites during roadworks, where appropriate
- P26 clear signs and signals, including highest displayable speed limits on signals, correctly and in a timely manner
- P27 maintain up to date, accurate and complete records

Knowledge and understanding

You need to know and understand:

Legal and organisational requirements

- K1 current legislation, policies, procedures and performance indicators relevant to identifying and managing operational hazards and risks using traffic management technology, and their implications for your area of operations
- K2 what constitutes both a confirmed and an unconfirmed report and how to determine the appropriate response
- K3 current policy and procedures for the use of technology in roadworks relevant to your area of operations
- K4 how to use the available traffic management technology, including when and how to set and clear signs and signals in accordance with your organisation's
- K5 how to monitor the network on CCTV in accordance with your organisation's
- K6 your levels of authority, skills and ability, and the actions necessary should these be exceeded

Stakeholders

You need to know and understand:

- K7 your partner stakeholder organisations and individuals involved with operations, and how to liaise with them
- K8 the information required by your partner stakeholder organisations
- K9 the needs of the wider community who are likely to be affected by operations requiring traffic management

Managing operational hazards

You need to know and understand:

- K10 the importance of gathering and reviewing information in relation to incidents involving the use of traffic management
- K11 the reasons for having traffic management contingency measures in place and the circumstances in which they should be used
- K12 how to monitor changes in the situation and respond appropriately using traffic management technology
- K13 potential hazards and risks to all involved in traffic management operations
- K14 how to create and maintain an incident record
- K15 how to relate geographic addresses on electronic systems to actual distances on the network, where appropriate

Use of technology

You need to know and

- K16 the importance of assessing the impact of proposed settings, including

SFJJA301

Manage inter-urban traffic using traffic management technology

understand:

- the criteria to be checked before the electronic systems proposal is implemented, and how to do this for single, block, sub-proposals and modifications of proposals
- K17 the factors to be taken into account when determining the extent of traffic management settings
- K18 the effects and implications of setting control and information systems used by your organisation to manage traffic flow on the road network
- K19 the geography of the road network for which you are responsible
- K20 the importance of checking that signalling is functioning and of identifying and reporting any faults in the traffic management detection and signalling systems and in the fault reporting structure

SFJJA301

Manage inter-urban traffic using traffic management technology

Developed by	Skills for Justice
---------------------	--------------------

Version number	1
-----------------------	---

Date approved	March 2009
----------------------	------------

Indicative review date	March 2014
-------------------------------	------------

Validity	Current
-----------------	---------

Status	Original
---------------	----------

Originating organisation	Skills for Justice
---------------------------------	--------------------

Original URN	SfJ JA301
---------------------	-----------

Relevant occupations	Public Services; Public Service and Other Associate Professionals
-----------------------------	---

Suite	Traffic Management
--------------	--------------------

Key words	traffic management, technology, trunk roads, congestion
------------------	---