
Overview

This standard is about implementing emergency procedures in tunnels as an appropriate response to incidents occurring in or on the approach to the tunnel. It includes monitoring both the flow of traffic and identifying and taking the necessary actions to address incidents within the tunnel.

An understanding and ability to implement response procedures for addressing potential risk scenarios which could occur in and on the approaches to tunnels is a key requirement of the standard.

Maintaining the health and safety of all of those using the tunnel is of paramount importance.

There is one element:

- 1 Implement tunnel emergency procedures

Performance criteria

You must be able to:

- P1 monitor traffic in and around the tunnel using the appropriate systems correctly, in line with your organisation's procedures
- P2 can apply relevant traffic management procedures for addressing potential risk scenarios, including fires and chemical spillages, which could occur in and on the approaches to the tunnel(s) within your area of operations, in line with your levels of authority and responsibility
- P3 identify promptly and correctly activities and incidents within the tunnel which require a response, identifying and implementing the relevant corresponding actions promptly
- P4 interpret correctly and report incidents accurately, promptly and calmly to the relevant person(s)
- P5 deploy the appropriate resources to address activities and incidents occurring in the tunnel
- P6 take the relevant actions to maintain the health and safety of road-users, including minimising the risk of injury to those effected by the incident, and to prevent an escalation of the disruption resulting from the incident
- P7 ensure that all relevant signs are activated and convey appropriate messages to road-users regarding incidents within the tunnel
- P8 ensure that incidents are cleared and normal traffic flow resumed in line with your organisation's procedures

Knowledge and understanding

You need to know and understand:

Legal and organisational requirements

- K1 current, relevant legislation, policies, schemes and procedures, including your organisation's standards and performance indicators, in relation to implementing emergency procedures within tunnels and their implications for your area of operations
- K2 health and safety requirements relating to traffic management within tunnels
- K3 how to use the available traffic management technology in your tunnel(s), including when and how to set and clear signs and signals in accordance with your organisation's requirements
- K4 how to monitor the tunnel on CCTV in accordance with your organisation's requirements
- K5 your level of authority and the actions necessary should these be exceeded, including the tunnel management hierarchy within your area of operations

Addressing risk scenarios associated with tunnels

You need to know and understand:

- K6 potential risk scenarios which could occur in and on the approaches to the tunnel(s) within your area of operations, including scenarios relating to vehicle and non-vehicle related incidents, fires, chemical spillages, traffic congestion, vehicle loads, weather hazards and planned maintenance
- K7 emergency response procedures for addressing fires and chemical spillages occurring in and on the approaches to the tunnel(s) within your area of operations, and your role and responsibilities associated with these procedures
- K8 response procedures for addressing the potential risk scenarios, in addition to fires and chemical spillages, which could occur in and on the approaches to the tunnel(s) within your area of operations, and your role and responsibilities associated with these procedures
- K9 the equipment, systems and communications infrastructure for dealing with potential risk scenarios which could occur in and on the approaches to the tunnel(s) within your area of operations

Managing road traffic in a tunnel

You need to know and understand:

- K10 the road network and associated infrastructure associated with the tunnel(s) in your area of responsibility
- K11 traffic management measures appropriate for dealing with normal traffic flow, and for special movements, planned and emergency maintenance, and emergency incidents, in and on the approaches to tunnel(s) within your area of operations

Implement tunnel emergency procedures

- K12 partner organisations involved in maintaining the flow of traffic within the tunnel(s) in your area of responsibility, and their principal roles and responsibilities
- K13 safe access and egress routes for vehicles and personnel within the tunnel(s) in your area of responsibility
- K14 the restrictions upon the type of traffic permitted to use the tunnel(s) within your area of operations, and the rationale for these restrictions
- K15 available alternative routes for road users unable to use the tunnel(s) within your area of operations
- K16 speed limits in and on the approaches to the tunnel(s) within your area of operations, and the rationale for these

Managing incidents in a tunnel

You need to know and understand:

- K17 the importance of undertaking risk assessments of incidents, the associated factors to consider when such incidents occur in and on the approaches to tunnels, and how to do this
- K18 the purpose of a command structure, and its importance and functions in relation to incident management
- K19 how to communicate within a command structure
- K20 how to identify when to hand over responsibility and the correct procedures for doing so
- K21 how to confirm priorities and objectives relating to an incident within tunnels
- K22 why it is important to prepare for contingencies where there are limitations on the availability and use of resources
- K23 how to deploy, monitor and control resources at incidents within tunnels
- K24 evacuation procedures for the tunnel(s) within your area of operations and your role and responsibilities associated with these procedures
- K25 how to monitor and review progress towards resolving incidents, including which stakeholder personnel should be involved in reviewing progress
- K26 how to monitor and maintain the health, safety and welfare of personnel dealing with an incident within a tunnel
- K27 why it is important to conduct briefings and de-briefings, how to do this and the points at which they should take place
- K28 the importance of maintaining an incident log and how to do this

Use of technology

You need to know and understand:

- K29 the importance of assessing the impact of proposed traffic management settings, including the criteria to be checked before the electronic systems proposal is implemented
- K30 the factors to be taken into account when determining the extent of traffic management settings

SFJJA303

Implement tunnel emergency procedures

- K31 the effects and implications of setting the signs used by your organisation to manage traffic flow in and on the approach to your tunnel(s)
- K32 the importance of checking that signalling is functioning and of identifying and reporting any faults in the traffic management detection and signalling systems

SFJJA303

Implement tunnel emergency procedures

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 JA303
---------------------	-----------

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

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

Key words	traffic management, tunnel, roads, emergency
------------------	--