

Focus on an important part of the safety documentation

Description of the organisation

and

Instructions specified by the TM

Part 1

General considerations

DIRECTIVE 2004/54/CE DU PARLEMENT EUROPÉEN ET DU CONSEIL
du 29 avril 2004

- 2.4. The safety documentation for a tunnel which is at the commissioning stage shall include in addition to the documentation required at the design stage:
- a description of the organisation, human and material resources and instructions specified by the Tunnel Manager to ensure operation and maintenance of the tunnel,

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It is not recommended to include the complete information (about the organization, resources, guidelines, instructions, procedures etc..), applicable to all tunnels, in each individual safety documentation.

It is not recommended to reproduce in safety documentations the integral text of other existing documents.

What is the goal of the safety documentation?

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Is it necessary that the administrative authority knows all details?

No, article 4 describes the mission of the AA as follows:

*The Administrative Authority", which shall **have responsibility for ensuring that all aspects of the safety of a tunnel are assured.***

Conclusion:

The AA must ensure that the TM has an organization that considers all aspects of optimal management of a tunnel. The AA is not responsible for the content of the various instructions and procedures as long as it ensures that the TM organization's considers all relevant aspects.

But what are the relevant aspects in the two domains:

Description of the organisation (annexe 2, art. 2.4)

and

Instructions specified by the TM (annexe 2, art. 2.4)

Description of the organisation, human and material resources

The safety documentation must describe the organizational principles of the:

- a.) Tunnel manager's internal resources
- b.) External resources who act on behalf of the Tunnel Manager
- c.) Emergency services

Later it is necessary to describe the relationships between these three groups.

The safety documentation must also describe the human and material resources for:

- a.) Tunnel operation
- b.) Maintenance of tunnels
- c.) Intervention in case of emergencies

Instructions specified by the TM

→ Duties, powers, responsibilities of different stakeholders

It is absolutely necessary to define everyone's responsibility.

It is necessary to define in detail the work of the internal and external stakeholders.

Part 2

Non-exhaustive list of the various documents that should be create by the TM in the domain:

Description of the organisation (annexe 2, art. 2.4)

and

Instructions specified by the TM (annexe 2, art. 2.4)

Part A) Organisation

- Organization for the exploitation of the road network
- Organization for the tunnel operation
- Mission and internal organization of the TM

B) Competence and responsibility of the different stakeholders

- Mission of the “Operations Manager”
- Mission of the ICT-manager
- Mission of the tunnel operators
- Mission of the technicians in charge of the tunnels
- Mission of the entity in charge of signage on the highway
- Mission of the safety coordinator (workers safety)
- Contract management (maintenance contracts etc.)

C) Relationships between stakeholders

- Relationship between the different stakeholders inside TM
- Relationship between the TM and the external companies involved in maintenance of tunnels

D) Additional plans that define the daily work

- Rules for the implementation of the signage on the highway
- Safety instructions to be considered for works on a highway and in a tunnel
- Concept for tunnel maintenance (preventive and corrective)
- Technical changes tracking (permanent and temporary changes)
- Plan to divert traffic in case of tunnel closure
- Plan for interventions that could be planned
- Plan for interventions that couldn't be planned

E) Background documents that describe the tunnels and the control center

- Description of the electromechanical equipment of tunnels
- Functional description of the electromechanical equipment
- Functional description of the control center
- Existing maintenance contracts
- Minimum operating conditions (for tunnels and the control center)
- Authorization to operate the tunnels (this authorization is issued by the AA before the tunnel is opened to traffic)

F) Emergency plans

- Emergency response plan
- Disaster recovery plan (DRP) for the control center
- Plan to restore a destroyed tunnel
- Pandemic plan
- Blackout plan

G) Analyses / Feedback

- Emergency exercises in tunnels
- Traffic incidents
- Accidents
- Fires
- Operational and organizational problems
- Technical experiences
- Knowledge verification of staff
- List of proposed changes and tracking of changes

H) Education and training plan

- Training plan for external and internal staff
- Practical training in order to manage rare events
- Multi-year Training Plan
- Assessment of staff skills
- List of courses and training conducted so far
- etc.

Thank you for your attention!