

The EU Road Safety Directive and its relevance for WG3

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Directive EU 2008/96 – Why it is relevant

- Mandatory for the EU
- Summarizes proven good practices
- Concerns all stages (from planning to operation)
- Applies to TEN-T (whose extensions are expected to follow similar standards)
- Its elements have been recommended in previous work and are already applied to some extent in EaP countries

Road safety directive 2008/96 – Which parts are relevant

Working Group 3

- Road safety impact assessment
- Road safety audit
- Road safety inspection
- Safety ranking and road network management

Working Group 1

- Accident data

Road safety impact assessment

- Definition: “Strategic comparative analysis of the impact of a new road (or of a substantial modification to the existing network) on the safety performance of the road network”
- Mandatory for all TEN-T infrastructure projects (advisable also to other EU-funded roads)
- Carried out at initial planning stage (before approval)
- Indicates road safety considerations that led to choosing the proposed solution
- Provides all relevant info for cost-benefit analysis of the different options assessed

Road safety impact assessment - Criteria

- Current situation vs. do-nothing scenario
- Road safety impacts of proposed alternatives (& comparison using cost-benefit analysis)
- Presentation of range of possible solutions
- Elements:
 - Fatalities and accidents
 - Reduction targets vs. do-nothing
 - Possible effects on existing networks
 - All road users, including vulnerable
 - Traffic; safe parking areas
 - Seasonal & climatic conditions; seismic activity

Road safety audit

- Definition: “An independent detailed systematic and technical safety check relating to design characteristics and covering all stages from planning to early operation”
- Mandatory for all TEN-T infrastructure projects (advisable also to other EU-funded roads)
- Competent auditors (at least one team member)
- Integral part of design process (draft, detailed, pre-opening, early operation)
- Competent entity shall state reasons for not rectifying unsafe features at each stage

Road safety audit - Criteria

- Criteria for draft design stage
 - Geographical location; seasonal and climatic / meteo conditions; seismic activity
 - Junctions & their layout
 - Cross-sections (lanes, width, cycle-tracks, footpaths)
 - Admissible traffic / road function / public transport usage
 - Speeds
 - Horizontal and vertical alignments; visibility
 - Rail level crossings
- Additional sophistication in subsequent stages (coherence of signs/markings; lighting; night visibility; roadside incl. fixed obstacles and vegetation; safe parking; vulnerable road users; adaptation of road restraint systems; pavement condition; actual user behavior – early operation audit)
- *Typically, national / best-practice audit guidelines feature checklists*

Road safety auditor requirements

- Training curricula per member state
- Initial training => Certificate of competence => Further periodic training
- Pre-directive certificates of competence are recognized (audits were formalized in the 1990s in several countries)
- Transition foreseen in EU countries (from 2 years after national adoption, only certified auditors may operate)
- Requirements:
 - Relevant experience in road design, road safety engineering, accident analysis
 - Auditor shall not be involved in the conception or operation of the project at the time of auditing it

Road safety inspection

- Definition: “An ordinary periodical verification of the characteristics and defects that require maintenance work for reasons of safety”
- Periodic inspections and surveys on roads in operation
- Undertaken by the competent entity
- Special inspection schemes for roadworks safety
- As all of 2008/96, applicable in all TEN roads (and advisable in other EU-funded roads)
- *In practice, several countries’ curricula have merged auditor + inspector training & tools used (incl. checklists)*

Road safety ranking & network management

- Definition of high accident concentration section ranking: “A method to identify, analyze and rank sections in operation for over 3 years with a large number of fatal accidents in proportion to the traffic flow” (blackspots)
- Definition of network safety ranking: “A method for identifying, analyzing and classifying road network parts according to their *potential* for safety development and accident cost savings”
- Reviews of ranked sections (both types) every 3 years, priority sections later evaluated by experts (teams with at least one auditor-level member)
- Remedial treatments prioritized taking into account cost-benefit ratio
- Proper signing both for warning and during remedial works

Road safety ranking & network management - Method

- Examine previous reports; analyze accident reports
- 3-year analysis (fatalities, serious injuries)
- Potential remedial measures within different timescales (examples, presented in order of increasing complexity):
 - Roadside obstacle removal / road restraint system improvement; Speed limits / enforcement; Visibility; Signs/markings improvement; Rockfall and similar protection; Pavement improvement (e.g. skidding, roughness)
 - Road restraint system redesign; Change in overtaking layout; Junction / rail-crossing improvement; Alignment / cross-section change; Traffic management / control systems; Reduction of conflict with vulnerable users
 - Road upgrading; Pavement rehabilitation / replacement; Intelligent signing / ITS and telematics

Road safety data

- Fatal accident reports by competent entity in all TEN roads
- Average social costs of severe accidents calculated and updated every 5 years
- Info to be included in reports:
 - Precise location; Pictures / diagrams; Date and hour
 - Info on road (road and area type, lanes, junction type, lighting, weather conditions, roadside obstacles, markings, speed limits, surface)
 - Accident severity (common criteria)
 - Personal data (age, sex, nationality, alcohol level, use of safety equipment)
 - Accident data (collision type, vehicle and drive maneuver)
 - Time elapsed between occurrence, reporting, emergency service arrivals