



International legal framework

EU Road Infrastructure Safety Management Directive

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Senior Transport Engineer

EIB - the European Union's bank

Improving the quality of life in Europe and beyond since 1958





Governed by the EU Member States
Also active in non-EU countries



Leading provider of climate finance
Leading provider of infrastructure finance



90% of lending in the EU

Non-EU projects are gaining importance



2

EIB priorities

INNOVATION



ENVIRONMENT



SMEs



INFRASTRUCTURE



Incl. 3000 km roads/streets every year



3

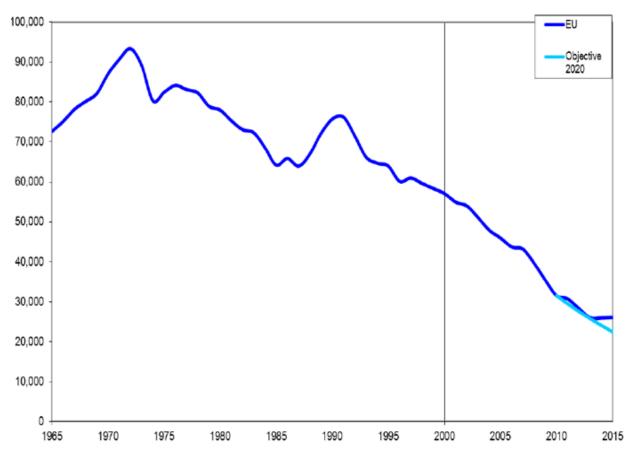
EIB and UN policy on road safety





Status for road accidents in the EU

Road fatalities in the EU 1965-2015

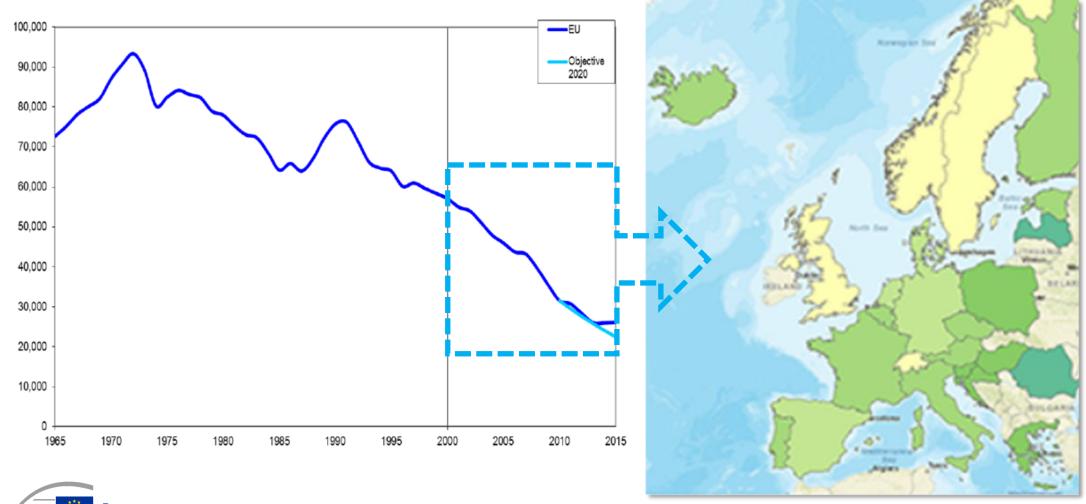






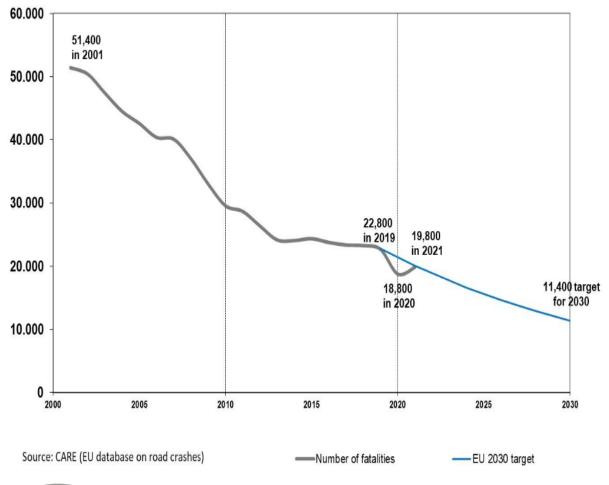
Status for road accidents in the EU

Road fatalities in the EU 1965-2015



Status for road accidents in the EU

Road fatalities in the EU 2000-2020







EU policy on road safety

Driven by the Valletta Declaration and EU Road Safety Policy Framework 2020-2030

- Additional 50% reduction in road fatalities by 2030
- Vision Zero by 2050
- EU Directive on road infrastructure safety management
- Member States that applied the principles to national roads since 2010 achieved the best results
- Only 2% of global road fatalities occur in the EU
 - but many lessons learned





Legal framework

Directives related to road safety

Directive 2008/96/EC & Directive (EU) 2019/1936

Road infrastructure safety management on

- The Trans European Network (TEN T)
- Motorways
- Primary roads
- Any road project funded/financed by the EU outside urban areas

Directive 2004/54/EC

Minimum safety requirements for TEN T tunnels > 500m





Legal framework and application

Directive 2008/96/EC & (EU) 2019/1936 on road infrastructure safety management (general safety management)





Directive 2004/54/EC on minimum safety requirements for tunnels (incident management)

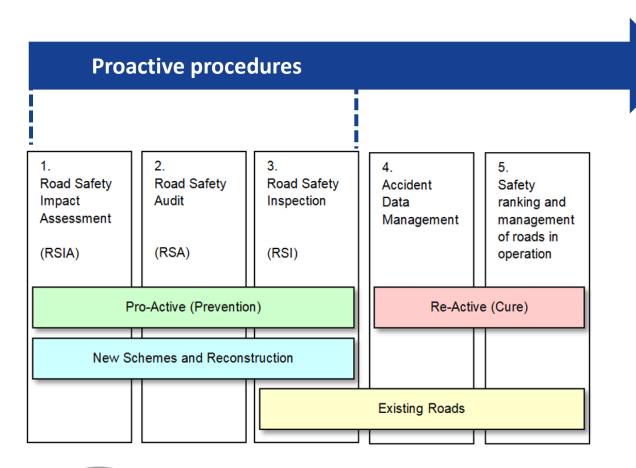


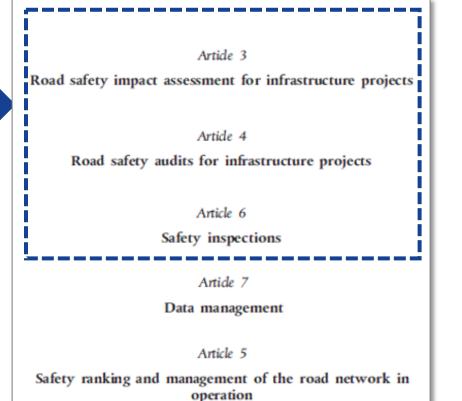




RISM Directive and auditing practices

Directive 2008/96/EC

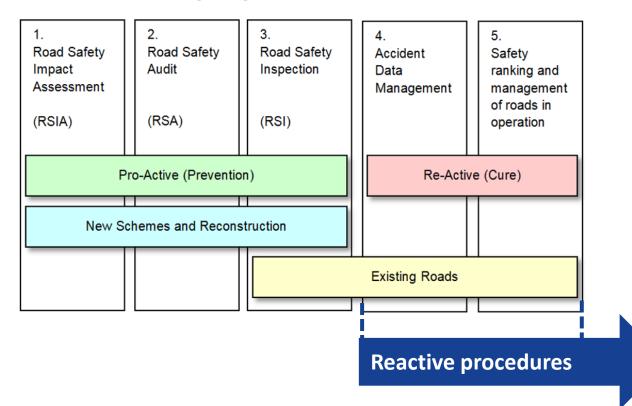


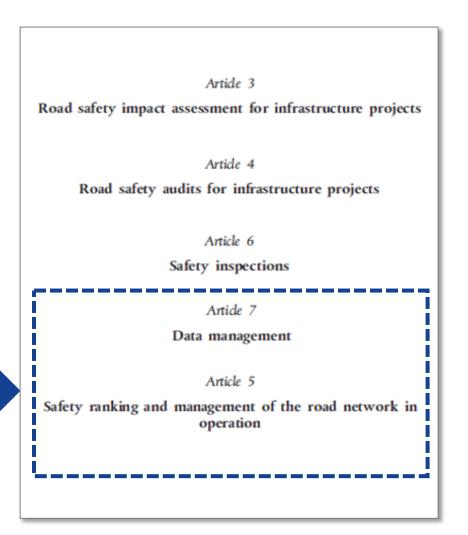




RISM Directive and auditing practices

Directive 2008/96/EC







Directive (EU) 2019/1936

- **Network Wide Road Safety Assessment** to be conducted before end of 2024
- Safety Ratings should be reported
- Methodology launched 2023
- **Reactive approach** based on crash statistics
- **Proactive approach** based on in-built safety characteristics

High Priority (class 4)

(class 3)

LowPriority (class 2)

Very Low Priority (class 1)

Parameters included in the Proactive approach

MOTORWAYS

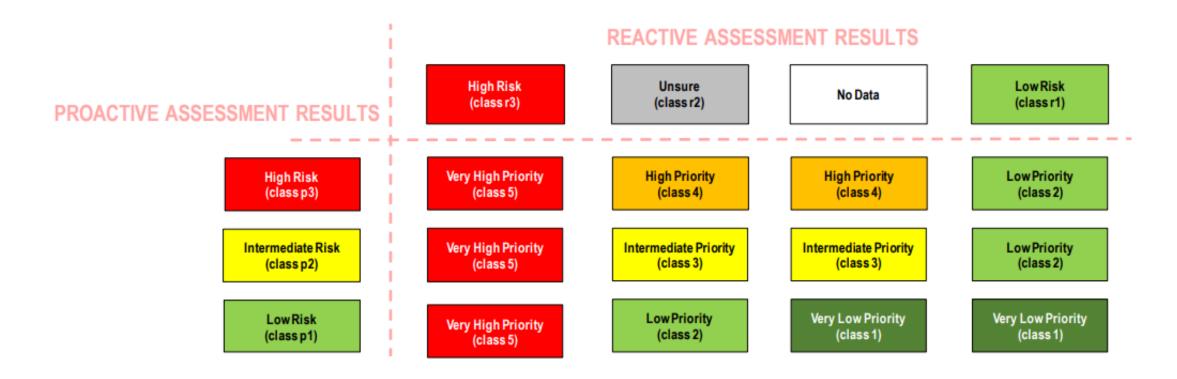
- Lane width *
- Roadside (clear zone width, obstacles, presence of barriers)
- Curvature *
- Interchanges *
- Conflicts between pedestrians/ bicyclists and motorized traffic
- Traffic operation centers and / or mechanisms to inform users for incidents PRIMARY ROADS
- Lane width **
- Roadside (clear zone width, obstacles, presence of barriers) **
- Curvature
- Density of property access points **
- Junctions
- Conflicts between pedestrians/ bicyclists and motorized traffic
- Shoulder type and width **
- Passing lanes **
- Signs and markings

Very High Priority (class 5)

Intermediate Priority

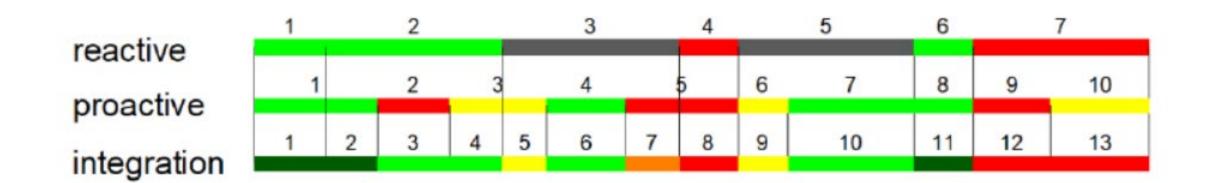


Safety Ratings based on integration of reactive and proactive approach





Reactive assessment: police reported accidents takes precedence





NWA Proactive									NWA Reactive						NWA Integrated
no.	Subsection	Direction	Segment Start (Chainage)	Segment End (Chainage)	Length of motorway segment (m) Len	NWA Proactive Final ranking		no.	Subsection	Direction	Pki	PKf	Length of motorway segment (Km)	NWA Reactive Final ranking	NWA integrated
1	Pedras Salgadas - A7	С	34 400	35 800	1400	Intermediate Risk		- 1	Pedras Salgadas - A7	С	34,400	35,800	1,400	Lowrisk	class 2
II	Pedras Salgadas - A7	С	35 800	40 000	4200	High Risk		П	Pedras Salgadas - A7	С	35,800	40,000	4,200	Unsure	class 5
II.1	Pedras Salgadas - A7	С	40 000	45 000	5000	High Risk		II.1	Pedras Salgadas - A7	С	40,000	45,000	5,000	Unsure	class 5
Ш	A7 - Vila Pouca de Aguiar	С	45 000	45 600	600	Low Risk		Ш	A7 - Vila Pouca de Aguiar	С	45,000	45,600	0,600	Lowrisk	class 1
IV	Vila Pouca de Aguiar - Fortunho	С	45 600	46 900	1300	Low Risk		IV	Vila Pouca de Aguiar - Fortunho	С	45,600	46,900	1,300	Unsure	class 2
V	Vila Pouca de Aguiar - Fortunho	С	46 900	48 300	1400	Low Risk		٧	Vila Pouca de Aguiar - Fortunho	С	46,900	48,300	1,400	Unsure	class 2
VI	Vila Pouca de Aguiar - Fortunho	С	48 300	48 800	500	Intermediate Risk		VI	Vila Pouca de Aguiar - Fortunho	С	48,300	48,800	0,500	Unsure	class 3
VII	Vila Pouca de Aguiar - Fortunho	С	48 800	53 000	4200	High Risk		VI	Vila Pouca de Aguiar - Fortunho	С	48,800	53,000	4,200	Unsure	class 5
VIII	Vila Pouca de Aguiar - Fortunho	С	53 000	53 900	900	Intermediate Risk		VII	Vila Pouca de Aguiar - Fortunho	С	53,000	53,900	0,900	Lowrisk	class 2
IX	Vila Pouca de Aguiar - Fortunho	С	53 900	54 800	900	High Risk		VIII	Vila Pouca de Aguiar - Fortunho	С	53,900	54,800	0,900	Unsure	class 5
X	Vila Pouca de Aguiar - Fortunho	С	54 800	56 200	1400	High Risk		X	Vila Pouca de Aguiar - Fortunho	С	54,800	56,200	1,400	Unsure	class 5
ΧI	Vila Pouca de Aguiar - Fortunho	С	56 200	60 200	4000	Low Risk		х	Vila Pouca de Aguiar - Fortunho	С	56,200	60,200	4,000	Unsure	class 2
XI.1	Vila Pouca de Aguiar - Fortunho	С	60 200	64 700	4500	Intermediate Risk		XI.1	Vila Pouca de Aguiar - Fortunho	С	60,200	64,700	4,500	Unsure	class 3



Tunnel Directive and auditing practices

Directive 2004/54/EC on minimum requirements to tunnels

- Requirements to the tunnel authority, management, independent inspections, risk analysis
- Single or twin tube
- Geometry, speed management
- Escape routes, emergency exits, shelters
- Fire detection and emergency response
- Ventilation, lighting, water supply
- Control center and communication







