Proactive Role of Road Infrastructures in the overall Transport System for Safety

Christophe Nicodème
Director General
European Union Road Federation (ERF)

ERF is a signatory of the European Road Safety Charter, associating civil society to Europe’s goal of halving the number of road deaths by 2010

Brussels Programme Centre
The Problem
Index

European context and policy overview

Research framework

The ERF
The European Context (1/2)

Evolution 1990 - 2010

EU fatalities

- CARE (EU road accidents database)
- National data

2010 objective: 25,000 lives to save

Evolution of Fatalities in EU-25 (2006)
The European Context (2/2)

- Road Safety levels in Europe remain preoccupying
- Road Safety remains a major societal issue in Europe
- Official incident statistics significantly understate the importance of the road as a major contributing factor
A shared responsibility (1/2)

The EU has legal obligations arising from the Treaty…

- Article 71: measures to improve road safety integrated within Common Transport Policy.
- Article 155: technical harmonisation and interoperability of the Trans European Network (financing through Cohesion Fund).
- Article 152: public health and consumer protection issues.

The **2003 RSAP** (European Commission’s Road Safety Action Programme) translates these obligations into an action plan...but shares the overall responsibility for road safety
A shared responsibility (2/2)

The RSAP proposes actions on:

• **Driver Behaviour**: better driver education & enhanced traffic law enforcement

• **Vehicle Safety**: technical inspections, active & passive safety measures, use of Galileo

• **Road Infrastructure**: Sharing of Best Practices, elimination of Black Spots, New Approach to Road Infrastructure Safety Management!

• **October 2006**: *Proposal for a Directive on Road Infrastructure Safety Management*
The Infrastructure Safety Directive (1/3)

Europe’s most ambitious legislation is still to come

✓ Framework legislation on road infrastructure management applicable to the TERN (Trans-European Road Network)
✓ Provides guidance (mentality change) to ensure safety is integrated at all stages of road design, construction and management
✓ Who will it affect?
  ➢ Road authorities: safety procedures integrated in all phases of road planning, design, construction and operation
  ➢ Road engineers: compulsory qualifications and certification, best practice exchanges
  ➢ Motorists: introduction of “black spots” signposts
✓ 1,300 lives could be saved every year!
The Infrastructure Safety Directive (2/3)

Preventive strategies:
- For new roads and major changes of operation: Safety Impact Assessment.
- At pre-opening stage: Safety Audits.
- As part of regular road maintenance: Safety Inspections.

Audit report:
- Delivers an independent evaluation of the road’s accident potential
- Identifies any potential safety deficiencies
- Makes recommendations to changes in the design

➔ 30% of problems identified during an audit will occur within 5 years unless the recommendations are implemented.
The Infrastructure Safety Directive (3/3)

2007:
- European Parliament’s Transport Committee voted against the proposed Directive (1 vote margin).
- EP Plenary decided not to hold vote, but referred the matter back to the Committee for reconsideration.

Further Steps:
- In February 2008, the TRAN Committee voted in favour of the proposal.
- EP and Council to decide via Codecision procedure.

→ Vote in second quarter of 2008!
Index

- European context and policy overview
- Research framework
- The ERF
Driving seems so easy... (1/3)

• The weakest link?

- Most crashes occur when ordinary people make ordinary mistakes.

- Accidents as an aggregate are systematically over-represented at certain locations and in certain circumstances.

- Need for:
  - Self-explaining roads
  - Forgiving roads
Driving seems so easy... (2/3)

Case study

The driver
Young, inexperienced, driving fast

The car
Worn rear tires

The road
Wet, no protective devices
Driving seems so easy... (3/3)

How can accidents be avoided?

• Acting on the driver
  – More training, graduate licenses

• Acting on the car
  – Speed limitation devices, improved stability programmes

• Acting on the road
  – Passive safety devices, porous road surfacing, driver information (VMS, road signs, etc.)

Driving mistakes will remain a fact of life.

Necessary, but important phase-in time.

Immediate effect!
The teachings of European research

Obvious problems:
The teachings of European research

Less obvious problems:

Vehicle travels behind protection system
The teachings of European research

• Problem faced today in road design and roadside safety is not a lack of safety devices but a lack of direction in the implementation, maintenance, and operation of these devices.

• Crucial information is often unavailable to road engineers:
  - What is the most common single vehicle collision configuration?
  - What is the effectiveness of passive safety devices?
  - What road geometric and surface characteristics are likely to trigger accidents?

⇒ European research programmes can assist network managers in anticipating road accidents and prioritising safety decisions!
Index

European context and policy overview

Research framework

The ERF
“The Voice of the European Road”

• ERF is the Brussels Programme Centre of the International Road Federation (IRF), founded in 1948 to offer an international forum to public and private road sector organisations

• Three regional programme centres (Washington D.C, Geneva and Brussels) serving over 350 Members in 90 countries

• An unparalleled range of services:
  – Networking and business development
  – Education and training
  – Conferences and seminars
ERF and safer road engineering (1/2)

- ERF is a *platform for dialogue and research* at the service of the European road community.

- ERF initiates and supports *scientific studies and publications* aimed at improving the knowledge of the European road system.

- ERF gives the *road community* a consistent and united voice in all transport areas:
  - Socio-economic contribution of roads to society
  - Sustainable road construction
  - Infrastructure financing
  - Intelligent roads
  - Safer road engineering
ERF and safer road engineering (1/2)

- Signatory to EU Road Safety Charter
- Engineering Safer Roads (Bi-monthly newsletter)
- Discussion Papers (“Safety on Motorway Workzones”)
- Publications (“Designing and keeping roadsides safe”, “Better road infrastructure, saving your life”)
- Technical Working Groups
- EU Research Projects (RANKERS, RISER, ROBUST, Guidelines to Black Spot Management…)
- TAIEX Seminars
- 3d European Road Congress – Brussels – 25 June 2008

All publications and informations are available at http://www.irfnet.eu/
Thank You For Your Attention

European Union
Road Federation (ERF)

Place Stéphanie, 6 / B
B-1050 Brussels (Belgium)
Tel: + (32) 2 644 58 77
Fax: + (32) 2 647 59 34
E-mail: info@erf.be
http://www.irfnet.eu

Brussels Programme Centre