Current and future challenges of the European Road Safety Observatory

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European Road Safety Observatory

- The ERSO is the information system of the European Commission with harmonised specialist information on road safety practices and policy in European countries.
- The framework of ERSO was developed within the SafetyNet project (2004-2008), in which 22 institutes from 17 countries cooperated.
- Its content was updated and expanded within the DaCoTA project (2010-2012), in which 17 institutes participated.
- Current updates of the ERSO (2015-2018) are carried out by NTUA, KFV and ERF for the EC DG-MOVE.
In 2010, the EU set a target of **reducing road deaths by 50% by 2020**, compared to 2010 levels, followed an earlier target set in 2001 to halve road deaths by 2010, which was almost accomplished.

In 2016, about **25,500** people were killed and **135,000** people were seriously injured in road accidents in the EU.

In 2016, EU road fatalities **were reduced by 2%** after two years of stagnation and **by 19%** since 2010.

On average about **8%** of road fatalities occurred on motorways, **37%** in urban areas and **55%** on rural roads.

Car occupants accounted for **46%**, pedestrians for **21%** and motorcyclists for **14%** of road fatalities.

**Speeding, drink or distracted driving and non-use of safety devices** are the leading causes of death and serious injury in Europe.
The role of the ERSO

- Data collection and analysis are essential for the road safety management process.

- Within the development of ERSO, road safety related data and knowledge at European level (28 EU and 4 EFTA countries) were gathered and made available to road safety professionals and decision makers.

- **Data** included in ERSO (macroscopic and in-depth) concern:
  - Road accidents
  - Risk exposure
  - Safety performance indicators
  - Under-reporting of accidents
  - Country characteristics
  - Social costs
  - Traffic laws and measures
  - Accident causation data
  - Accident injury data

- The **knowledge** section contains several reports on important road safety issues, as well as the road safety country profiles.
Methodological challenges

• Definition of **common protocols** for data collection

• **Availability** of data

• Systematic **collection** of data and information

• **Analysing** data

• **Presentation** of the results responding to user’s needs

• **Continuity** in making all results publicly available
ERSO Data and Information

- The Annual Accident Reports (AAR)
  - Overview – major issues
  - Time series – last 10 years in detail
  - Fatalities of last year (People involved, Modes of transport, Accident characteristics, Periods of time, Type of area/road, Weather conditions etc.)

- 17 Traffic Safety Basic Facts (BFS)
  - Main Figures
  - Children
  - Young people
  - Youngsters
  - Elderly (aged >64)
  - Pedestrians
  - Cyclists
  - Motorcycles & Mopeds
  - Car Occupants
  - HGVs & Buses
  - Motorways
  - Roads outside urban areas
  - Urban Areas
  - Seasonality
  - Single Vehicle Accidents
  - Gender

- Road Safety Country Overviews
  - Structure and Culture
  - Programmes and Measures
  - Road Safety Performance Indicators
  - Road Safety Outcomes
  - Social Cost
  - Synthesis
ERSO Knowledge

- 22 Traffic Safety Syntheses
  - Pedestrians and Cyclists
  - Work-related Road Safety
  - Speed & Speed Management
  - Cell Phone Use while Driving
  - Fatigue
  - Power Two Wheelers
  - Novice Drivers
  - Older Drivers
  - Serious injuries
  - Driver Distraction
  - Children
  - Alcohol
  - eSafety
  - Post Impact Care
  - Roads
  - Speed Enforcement
  - Vehicle Safety
  - Cost-Benefit Analysis
  - Integration of road safety in other policy areas
  - Quantitative Targets
  - Road Safety Management
  - Safety Ratings

- 64 Infographics based on the above reports are available
ERSO added value

- ERSO is a powerful road safety information system with **comparable information** among European countries.

- ERSO results can contribute significantly to:
  - **monitoring** road safety trends
  - **understanding** underlying road safety risk factors in combination with a more detailed analysis
  - **benchmarking** road safety performances
  - identification of **best practices**
Need for more data and knowledge in Europe

- Effective road safety management systems need to be based on evidence.

- Road accident and casualty data are insufficient for monitoring and understanding road safety.

- Additional data need to be co-examined:
  - risk exposure data
  - safety performance indicators (SPI)
  - economic and health indicators
  - road safety rules and regulations
Next steps for improved road safety data and knowledge in Europe

• More surveys for **exposure, performance indicators, driver behaviour**

• Establish a common methodology in order to estimate the **real number of serious (and slight) road injuries** under the same definitions.

• More **large scale experiments** (in-depth accident investigation, naturalistic driving, driving simulator)

• More research and analyses to **support policy making**
Injury database

- **MAIS3+** has to be adopted by all European countries for defining injury severity and data be collected under this definition.

- Establish a frequent Pan-European survey linking police and hospital data, using a common methodology and definitions, in order to estimate the real number of serious (and slight) road injuries.

- Establish a Pan-European in-depth accident investigation network (e.g. based on the DaCoTA recommendations).

- **Comparable injury data** at disaggregate level for detailed analyses focusing on specific road user types (e.g. VRUs), area types (e.g. cities) etc.
Exposure and Performance Indicators databases

- Development of the appropriate **sampling and methodological framework** for data sampling and surveys.

- **Types of sources:**
  - Questionnaires to national representatives (NR), governmental or independent experts;
  - Roadside observational surveys on representative sections of the road network;
  - Questionnaire surveys on representative samples of road users.

- Development of the **Exposure and Road Safety Performance Indicators Databases** with a powerful communication interface.

- Carry out **targeted analyses** to support evidence based decision making.
Conclusions

• High need to enrich ERSO with **more data and indicators** mainly concerning:
  • Exposure data
  • Road Safety Performance Indicators
  • Serious injuries (MAIS 3+)

with data to be collected systematically by a uniform methodology.

• ERSO should guide European decision makers to **collect and exploit systematically** high quality road safety data in order to better support local, regional and national policies, programmes and measures.
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