

#### THE 6TH IRTAD CONFERENCE

10-12 October 2017 - Marrakech - Morocco

# Current and future challenges of the European Road Safety Observatory

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Marrakesh, 12 October 2017

#### 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.





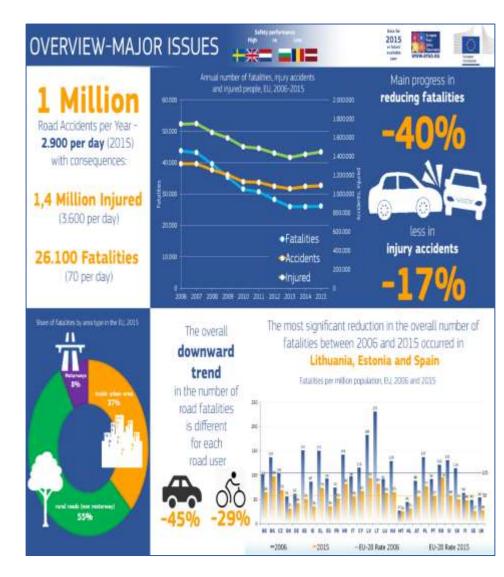




### Road Safety in the EU

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- 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

  - Elderly (aged >64) Motorways
  - Pedestrians

- Cyclists
- Motorcycles & Mopeds
- Young people Car Occupants
- Youngsters HGVs & Buses

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





- Roads outside urban areas
- Seasonality
- Single Vehicle Accidents
- Gender











#### **ERSO Knowledge**

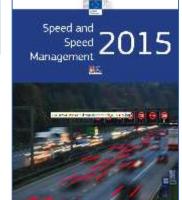


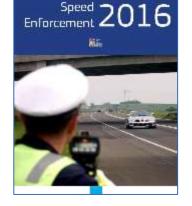
- 22 Traffic Safety Syntheses
  - Pedestrians and Cyclists
  - Work-related Road Safety
  - Speed & Speed Management
  - Cell Phone Use while Driving
  - Fatigue
  - Power Two Wheelers
  - Novice Drivers
  - Older Drivers
  - Serious injuries
  - Driver Distraction
  - Children
  - Alcohol

- 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



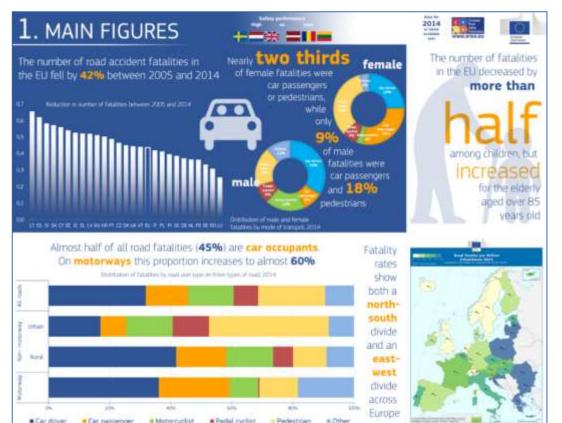








- ERSO added value
  ERSO is a powerful road safety info
  - ERSO is a powerful road safety information system with comparable information among European countries.
  - ERSO results can contribute significantly to:
    - monitoring road safety trends
    - **understanding** underlying road safety risk factors in combination with a more detailed analysis
    - benchmarking road safety performances
    - identification of best practices



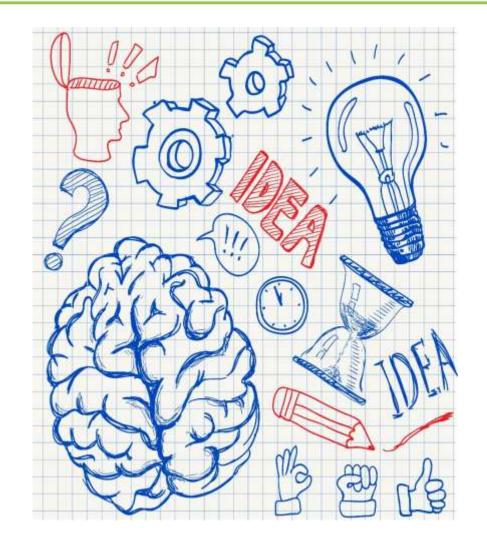




### Need for more data and knowledge in Europe

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- 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





- 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.







#### 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.



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#### 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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