Monday 15 May at 14:00

**Workshop**

in the framework of the

*Fourth United Nations Global Road Safety Week*

in 14 May 2017

**The future of road safety research**

**NTUA Zografou Campus, Athens**

**Railways Amphitheatre of the Department of Transportation Planning and Engineering**

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**The CEDR Road Safety APM and CMF Repository PRACT**

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Together with:

Alexandra Laiou, George Yannis
The PRACT project

Predicting road accidents - A transferable methodology across Europe
(http://www.practproject.eu/)

Apr 2014 – May 2016
Repository on-going operation (www.pract-repository.eu/)

funded by the National Road Authorities of Germany, Ireland, UK and the Netherlands

within the Transnational Research Programme on Safety of the European Conference of Road Directors (CEDR)
The problem

Although high levels of data availability were reported, particularly for motorways, most National Road Administrations (NRAs) in Europe do not systematically use quantitative methods during decision making on road safety improvements.
Methodological approach
PRACT results

- A **Trans-European Accident Prediction Model** has been developed with a single structure and different parameters for different countries. The model has been fitted to data from 5 Countries (Italy, UK, Greece, Netherlands, Germany).

- A **user friendly tool** has been developed to assist in the application of APMs according to data availability and local conditions.

- A procedure to **check the transferability of CMFs** has been developed and incorporated in the tool.

- A **CMF and APM Repository** has been developed and is freely available on line.
The Repository Development

- The Repository has two parts:
  - Crash Modification Functions (CMF) part
  - Accident Prediction Models (APM) part

- Both parts are based on the respective inventories developed within PRACT review process:
  - All reviewed APMs were included.
  - Only high quality CMFs were included, on the basis of specific criteria, examining statistical design, testing for statistical significance, and sample size.

- The Repository includes:
  - 146 APMs
  - 889 CMFs (1,526 examined CMFs)

www.pract-repository.eu
Main Features of Repository

- **HOME**: basic information about the repository and about PRACT project,
- **SEARCH FOR APMs**: search the database for APMs with specific characteristics,
- **SEARCH FOR CMFs**: search the database for CMFs with specific characteristics,
- **GLOSSARY**: definitions of the most commonly used terms
- **CONTACT**: allows the user to send email to the partners responsible for the operation and maintenance of the website

www.pract-repository.eu
Value of PRACT Repository

Compared to other existing online toolkits, PRACT Repository:

- Includes all types of data / models required in accident prediction (CMFs, SPFs, and Regression Equation APMs).

- Provides all available background information to verify quality and transferability of CMFs and APMs.

- Includes only CMFs of verified quality.

- Includes data also from European studies.

- Supplements and supports PRACT Accident Prediction Tool & Guidelines.
Future challenges

• The **quantification of the impact** of various road safety measures and interventions is a valuable tool for the Decision Makers (Public Authorities and private stakeholders).

• Rigorous **scientific modelling** is critical for reliable and transferable results.

• There is need for **continuous update** of APM and CMF databases and the related Decision Support Systems.

• **National Road Administrations** should be encouraged to use Accident Prediction Models in decision making.

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Save Lives #SlowDown

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