Overview

The objective of this research is the presentation of the European Road Safety Knowledge System, which was developed within the DaCoTA research project in order to support the European Road Safety Observatory of the European Commission (www.erso.eu).

A wealth of data was gathered, on road fatalities, exposure, health and causation indicators, safety performance indicators, socio-economic indicators, road user attitudes & behaviours, traffic laws and regulations, road safety management, etc., for 30 European countries.

Data and knowledge

Assembly of road safety data
- Road accident data
- Risk-exposure data
- Safety Performance Indicators
- Health data/indicators
- In-depth accident data

Assembly of road safety knowledge
- Road safety programmes
- Road safety measures
- Traffic rules
- Road user behaviour and attitudes
- Road accident cost review

Key road safety analyses

Annual Statistical Report & Basic Road Safety Fact Sheets
Include 52 Tables and 26 Figures from 27 European countries related to: Person class, Person killed, Area type, Motorway, Junction type, Weather conditions, Modes of transport, Month, Day of the week, Hour of day.

Country Overviews
Developed In order to facilitate road safety comparisons between countries containing information on number of accidents, fatalities as well as behaviour and policy terms.

Road Safety Management Profiles
A road safety management investigation model and questionnaire was used to describing road safety management structures and outputs.

Forecast Fact Sheets
Use the developments in road fatalities and exposure over the period 1970-2010 to forecast road fatalities on 2020, according to different mobility scenarios.

Web-texts
22 web texts, containing high quality information on important road safety topics (age groups, road user, hazardous behaviour, post-crash, road safety measures, policy issues).

Integrated Road Safety Knowledge System

The structure of a web-based Integrated Road Safety Knowledge System was designed and developed as a comprehensive and integrated road safety information system containing in a structured way all gathered safety data and knowledge, as well as the outputs of their analyses (safetyknowsys.swov.nl).

In this system different types content were included and respective structures were tested, allowing their future exploitation into the European Road Safety Observatory system by giving easy access to data, information and tools to anyone interested in road safety issues and thus supporting the road safety policy making in Europe.

Conclusions

- The European Road Safety Knowledge System presented in this paper is a solid but easily accessible, integrated road safety system that allows not only for better integration of the various data assembly processes, but also for the provision of a complete set of data services.
- This knowledge system includes a number of components, concerning data and tools, road safety issues and country profiles.
- The European Road Safety Knowledge System can also serve as example for the further enhancement of the European Road Safety Observatory (ERSO), as new structures and features were tested during the development procedure and new data, knowledge and analyses outputs have been assembled and have become available for incorporation into the existing ERSO.
- Decision making of national and international Authorities and Stakeholders will significantly benefit from the operation of a powerful European Road Safety Observatory.

Acknowledgement

This paper is based on work carried out within the scope of the DaCoTA (Data Collection Transfer and Analysis) project of the 7th Framework RTD Program of the European Commission. Additionally, the members of the EC CARE Experts Group, representing the 27 Member States have given considerable support to the project.