



Sub-Project 8.3

ACCIDENT ANALYSIS

The APROSYS research programme is to be driven by priorities in road safety as defined by real-world accident data. Sub-Project SP8. Work Package 3 is to provide additional accident analysis for research and development of safety technologies in the APROSYS Sub-Projects **Car Accidents, Heavy Vehicle Accidents and Intelligent Safety Systems**, although that part of the tasks within these Sub-Projects already include accident analysis.

Objectives

Five objectives are identified:

- First of all, a qualitative description of the accidents under study. The description consists of identifying the most relevant parameters that provide the best understanding of what a collision is (direction of impact, velocity, EES, nature and severity of injuries, number of impact, etc.), and the best scientific angle from which the collision has to be analysed (depending on the issue under study).
- The second objective is to set a series of simple statistical analysis on the basis of the available and the most relevant parameters data.
- The third objective is to select and examine a sample of representative accident cases for which an ultra-depth analysis is required.
- The fourth objective is to participate to the benefit parts of the cost-benefit analysis that will be performed in some of the sub projects. In other words, the aim is to identify the methodologies able to estimate the expected potential effectiveness of safety measures (as they are defined in the Sub-Projects) in terms of reduction of casualties, fatalities, collisions, etc. The second step is to apply the methodologies to the data available and provide the Sub-Projects with the estimates of the potential effectiveness of the selected safety measures.
- The last objective is to review the scientific international literature in case it can help in fulfilling the first four objectives and avoid duplicating work already done.

Expected results

- Benefit part of cost benefit analysis for the introduction of each part of a 4 part test procedure to improve side impact protection proposed by IHRA.
- Benefit part of cost benefit analysis for the introduction of a full width high deceleration frontal impact test in Europe.
- Characteristics of Heavy trucks versus pedestrians and/or cyclists, only front and side impacts. Statistical distributions of main parameters and description of typical crash types.
- Characteristics of Heavy trucks versus Passenger cars, only oblique and side impacts. Statistical distributions of main parameters and description of typical crash types.
- Classification of Side impact accidents (Cars). Distribution of relevant parameters characterising the classification.

Sub-Project data

It is planned to last 18 months and costs about 200 000 Euros.
This Sub-Project was finished in 2005.

SP8.3 Partners



Contact

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