Draft Recommendations for
Transparent and Independent
Road Accident Investigations

Accident  Data Protection
and Management

DITS - Brussels March 2007

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Accident Case

Renault 19

Ford Escort

Volkswagen Polo
Fatal accident investigation in Italy

- Planimetrical & Technical surveys by Police
  - Accident data recorded on Police DB
    - Standardized accident form sent to ISTAT
  - Preliminary report to Public prosecutor
    - Further investigations (penal process purpose)
  - Medical examination by emergency services

- Data gathering
- Data analysis
**Italian Data Protection (1)**

- Aim of Road police investigation: *acquire evidences of guilt and liability, evaluate violations of all parties involved*
- A Preliminary report is sent to Public prosecutor
- Gathered data are kept confidential
- Data gathered can be accessed, within the *judicial process*, by: expert witnesses, involved insurance companies, lawyers of involved persons
- → this could affect the data gathering process compromising *independence of data*
SafetyNet Recommendations for Data Protection

• **21.** Data that is collected about an accident by independent accident investigators should not be used to give evidence about fault or blame including in a court of law.

• **22.** Data collected should be protected by law in each country so that the data never needs to be disclosed to anyone else, including the police or any other enforcing agency.
Italian Data Management (1)

- Aim of Road police: *accident file management*
- A standardized form “mod. 360” is filled in
- Data are entered into a database
- Not all data gathered are introduced in the database (e.g. no medical data, no expert witnesses data)
SafetyNet Recommendations for Data Management (1)

• **23.** The Road Accident Investigation Body should collect and **record all information** relating to a specific accident in a database. This should be stored **in a structured manner** enabling future retrieval.

• **24.** An **integrated road accident investigation data management system** should be developed. This should include a road accident database with a linked storage system for road user, witness and expert witness accounts and a tool for progress tracking and managing individual investigations.
**Italian Data Management (2)**

- A national standardized form, “mod. ISTAT”, drawn up by the National Institute of Statistic (ISTAT) is filled in and sent to ISTAT.
- ISTAT is responsible for the data input in the national road accident database.
- Aim of ISTAT: *production of official statistics and satisfaction of the informative necessity expressed by the community*
- The data is granted according to the norms that safeguard the statistical secret.
SafetyNet Recommendations for Data Management (2)

25. A **Database Manager** should be appointed in each member state and be responsible for the management of data accuracy and completeness plus the analysis of the data.

26. The data collected should be **stored securely** according to the confidentiality requirements of the Member State.
27. No data containing information that would lead directly to the identification of persons involved in the accident should be released to a third party. Information may be made available for research or analysis purposes but this should be restricted to a format which does not permit identification or attribution.
SafetyNet WP5

Main focus on In-depth road accident data gathering and analysis

Task 1 → to develop a new fatal accident database with 1300 cases gathered in 7 different EU countries;

Task 2 → to develop a new accident causation database with about 1000 cases gathered in 6 different EU countries;

Each task has an emphasis on determining the main factors relating to each accident
SafetyNet WP5 practice 1/2

- Data are collected only for research
- Data collected are inserted in a DB, and variables used are the same for all the project partners
- Every investigated case inserted in the DB is identified by a unique code
SafetyNet WP5 practice 2/2

- Each partner of the project is responsible for the accuracy of its own data inserted in the DB.
- Periodically a sample of cases input in the DB is reviewed by the partners of the project.
- Data are stored securely and are exchanged between the partners using a Safe connection.
- No data containing information that would lead directly to the identification of persons involved in the accident are inserted in the DB.
Structure of SafetyNet DB

Data about the accident

- Accident Level Form
- Vehicle Level Form 1
- Roadway Level Form 1
- Road User Level Form 1
- Road User Level Form u_1
- Road User Level Form 1_n
- Road User Level Form v_n

SNACS

- Critical Events for Vehicle 1
- Critical Events for Vehicle n

Pictures of the accident
SafetyNet Accident Causation System (SNACS) Analysis

• is a methodology that help to identify the critical event and the contributing factors that lead to the accident
• each Vehicle involved in the accident is analyzed
• all the cases inserted in the Database developed in WP 5 Task 2 are analyzed
• is based on data gathered and mainly on interviews to road users involved in the accident and to witnesses
Case Number: 3521

Centre Name: BTS

Crash Participants:
- Total number of vehicles involved in the accident: 1

Please indicate number of relevant participants:
- Car / MPV:
- Bus / Minibus:
- Agricultural vehicle:
- Bicycle:
- Shoe Vehicle (Pedestrian):
- Van:
- Truck:
- Motorcycle / Moped:
- Train / Tram:
- Other:
- Unknown vehicle

Comments:
The car was proceeding on a left curve when the driver lost the control of vehicle running out of the road – near side. The car collided with its left side on a tree and then fell in an escarpment for about 30 m. It was raining and the asphalt was wet.

How was the majority of this accident level data collected?
- Information Source: Interview at accident scene
- Method of Investigation: On scene

What level of confidence you have in each source/method and the reasons why:
- Reasonable confidence

Interview comments:
Driver declared that the rain and the wet road was the causes of the accident.
L'analisi delle cause
Local DB

**INPUT APPLICATION**
- Case Numbers Activations
- Text & Images Data Entry
- Data Upload to the Server

**OUTPUT APPLICATION**
- Data Download
- Full Images Download

**Central DB**
- Connection to the main server and User Authentication
- Main Server
The partners involved in the project

The partners involved in the project are:

- VSRC
- TNO
- MUH
- DITS
- INRETS
- VALT
- Chalmers
SafetyNet Data Protection and Management

Investigation team

Data gathered

Structured data

Data Manager

Data stored
Questions

• Can the collected data be used as evidence?
• E.g. can it be used in judicial processes? Do members of the investigation team act as witnesses in court cases?
• Are adequate arrangements made for data storage, analysis and retrieval?