1. Background

2. Process & data

3. Security

4. CaDAS

5. Europa site
CARE database

- towards a common tool for a better monitoring of road accidents
- Council Decision 93/704/EC on the creation of a Community database on road accidents.
Objectives

- identify and quantify road safety problems
- evaluate the efficiency of road safety measures
- determine the relevance of Community actions
- facilitate the exchange of experience in this field
CARE database

History

- **1988 - 1993**: feasibility study for the creation of a desegregate road accident database (CARE)
- **1993 - 1996**: pilot operation of the CARE database.
- **1996 - 1999**: harmonisation of the data contained inside the database allowing for international comparisons and exchange of experience.
- **1999 - 2008**: full operation of the system. Production of detailed multi-dimension reports
- **2009 – today**: New model of data CaDAS
European Commission services

- DG MOVE as far as road safety issues are concerned
- Eurostat for statistics issues
- DI for informatics issues
CARE database

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process

- national data (Member States)
- data collection
- Uploading
- Transformation rules
- Common variables creation
- Verification with national publications
Data structure

• Basic definitions
  ◆ Accident
  ◆ Person killed, injured ...

• Common variables
  ◆ 1st study - 17 variables (on production)
  ◆ 2nd study - 43 variables (on production)
  ◆ 3rd study - socio-economics variables (working ...)
CARE database

17 Common Variables (1st study)

- Country
- Time (year, month, hour)
- Age group
- Gender
- Person class (driver, passenger, pedestrian)
- Area type (inside or outside urban)
- Motorway
- Junction type
- Vehicle
- Weather conditions
- Lighting
- ...

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CARE database

43 Common Variables (2nd study)

- Region
- Vehicle age
- Driving licence age
- Road surface condition
- Speed limit
- Alcohol test
- Psychophysical circumstances
- Junction control
- …..
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**access**

- **Complete database (national administrations):**
  - 3 institutes by Member State
    - Statistical
    - Ministry of Transports
    - others

- **Reports and statistics (Public access)**
National administrations access

- The user interface allows the production of multi-dimension aggregated reports in a standardised way, combining a wide range of information. The user can choose at the moment among data since 1991
Data confidentiality and security

- reports produced by the system are always aggregated
- the MS are requested to black out confidential data fields before send data
- A CARE user must have a valid user/password
- All measures have been taken to guarantee the confidentiality, security and integrity
CARE database

**CaDAS :** Common Accident Data Set’s objective is to **improve the compatibility** of road accident data throughout Europe.

**but**

**Disaggregate Variables, Values and Definitions :** data collection from the existing national databases … no harmonization between countries

**Data in some cases not complete :** depends on each country

**Data files in different formats :** each country has its own format
CARE database

CaDAS model
● **Standardised**: 
  - collect of the maximum needs of **each country** to define a minimum set of standardised data elements for **all countries**
  - **more** variables and values with a **common definition** in CADaS than in the CARE database

**but**

● **Flexible**: 
  - **specific requirements** from countries (questionnaire was developed and filled-in by representatives from almost all EU countries)
  - countries can start with adopting the CADaS proposal in pieces (**"à la carte"** system)

**and**

● **Easy to use**: 
  - structured in a **simple way**, without levels of hierarchy
  - **4 basic categories**: Accident, Road, Traffic unit Person

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CARE database

CaDAS model : **WHY ?**

- **Better data quality** : each country is responsible of the Qualification and Validation of their own Data (no more transformation in the global data warehouse)

- **Better Analysis** : a common methodology to improve the compatibility of road accident data throughout Europe

- **Better time** of loading, analysing and publishing : common model, easier to load in the global data warehouse

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CARE database

- Cadas Model

<table>
<thead>
<tr>
<th>ACCIDENT</th>
<th>ROAD</th>
<th>TRAFFIC_UNIT</th>
</tr>
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<tr>
<td>ACCIDENT_ID</td>
<td>F Raymond ROAD</td>
<td>TRAFFIC_UNIT_ID</td>
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<tr>
<td>LOCATION_CODE</td>
<td>ACCIDENT_TYPE</td>
<td>TRAFFIC_UNIT_TYPE</td>
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<tr>
<td>YEAR</td>
<td>ROAD_SURFACE_CONDITIONS</td>
<td>VEHICLE_SPECIAL_FUNCTION</td>
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<td>ACCIDENT_DATE</td>
<td>E ROAD</td>
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<td>ACCIDENT_TIME</td>
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<td>ENGINE_POWER</td>
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<td>VEHICLE_DRIVE</td>
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</table>

*: Fields moved from Road table to Accident table
**: Traffic Unit can also be a Vehicle or a Pedestrian
CARE database

- Cadas Universe
CARE database

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Fatalities by population
Evolution 2001 - 2010

Source: CARE (EU road accidents database)
Enfants (6-11 ans) tués/blessés graves dans des accidents de la route par heure et jour de la semaine
5 dernières années cumulées
(Pietons)

0 6 12 18 0 6 12 18 0 6 12 18 0 6 12 18 0 6 12 18 0 6 12 18
Lundi Mardi Mercredi Jeudi Vendredi Samedi Dimanche

6/7/2011
Nombre de jeunes (18-25 ans) tués dans des accidents de la route par heure et jour de la semaine

France (1996 - 2000)
CARE database

Road Deaths by Transport Mode 2009

Road Deaths per Million Inhabitants 2009
Cars and Taxis
CARE database
CARE database