SAU workshop
Valencia, June 14th - 15th 2007

Recommendation for the
Common Accident Data Set (CADaS)

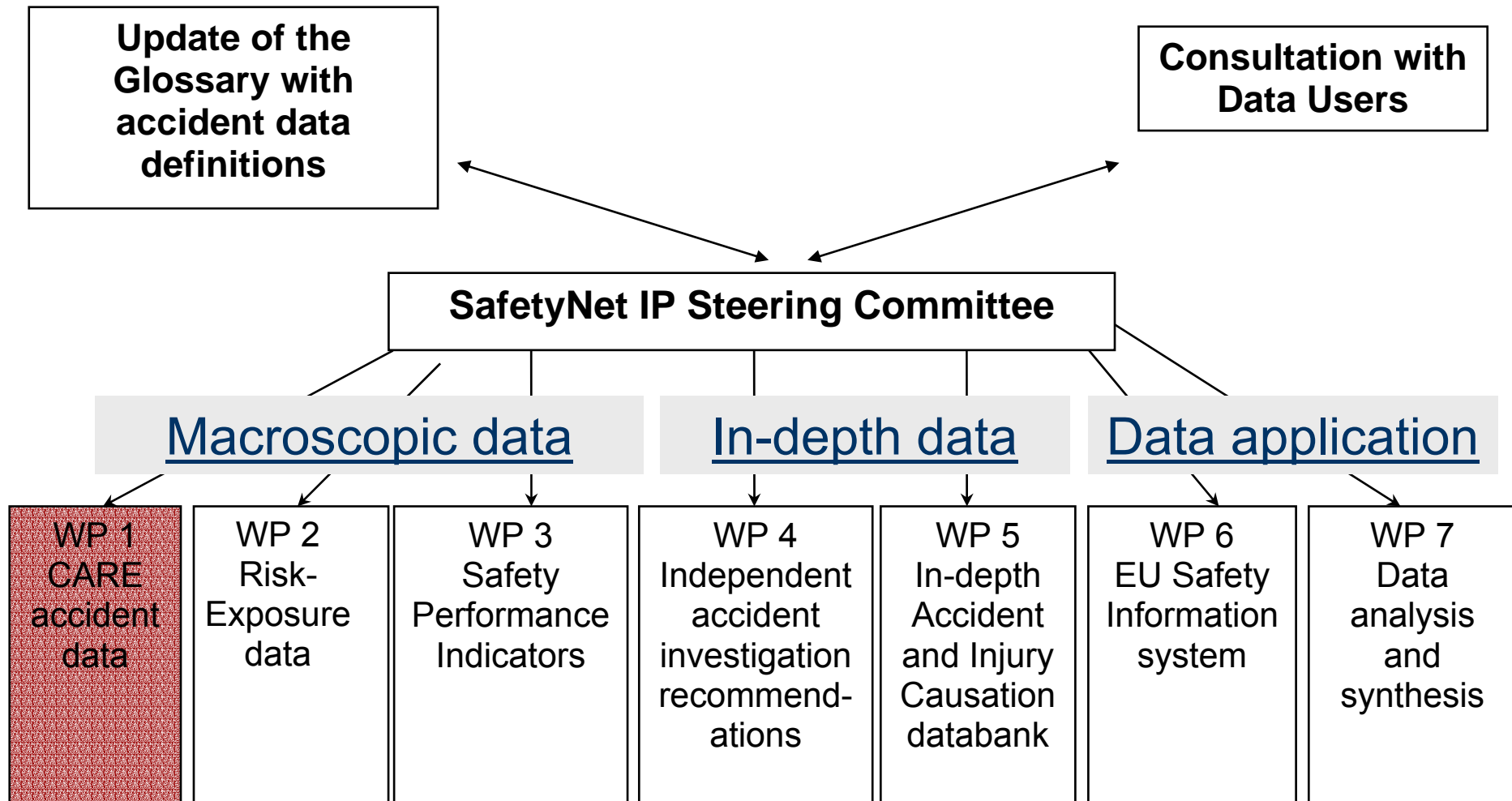**CADaS**
COMMON ACCIDENT DATA SET

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SafetyNet
Building the European Road Safety Observatory

Update of the Glossary with accident data definitions

Consultation with Data Users

SafetyNet IP Steering Committee

Macroscopic data

In-depth data

Data application

WP 1 CARE accident data

WP 2 Risk-Exposure data

WP 3 Safety Performance Indicators

WP 4 Independent accident investigation recommend-ations

WP 5 In-depth Accident and Injury Causation databank

WP 6 EU Safety Information system

WP 7 Data analysis and synthesis

THE FOUR STEP METHODOLOGY

Consideration of EU and international data collection systems, methodologies and data definitions

Definition of necessary data for accident analysis

Establishment of a basic Common Accident Data Set and methodology

Partial adoption, on a voluntary basis, of the Common Accident Data Set and methodology
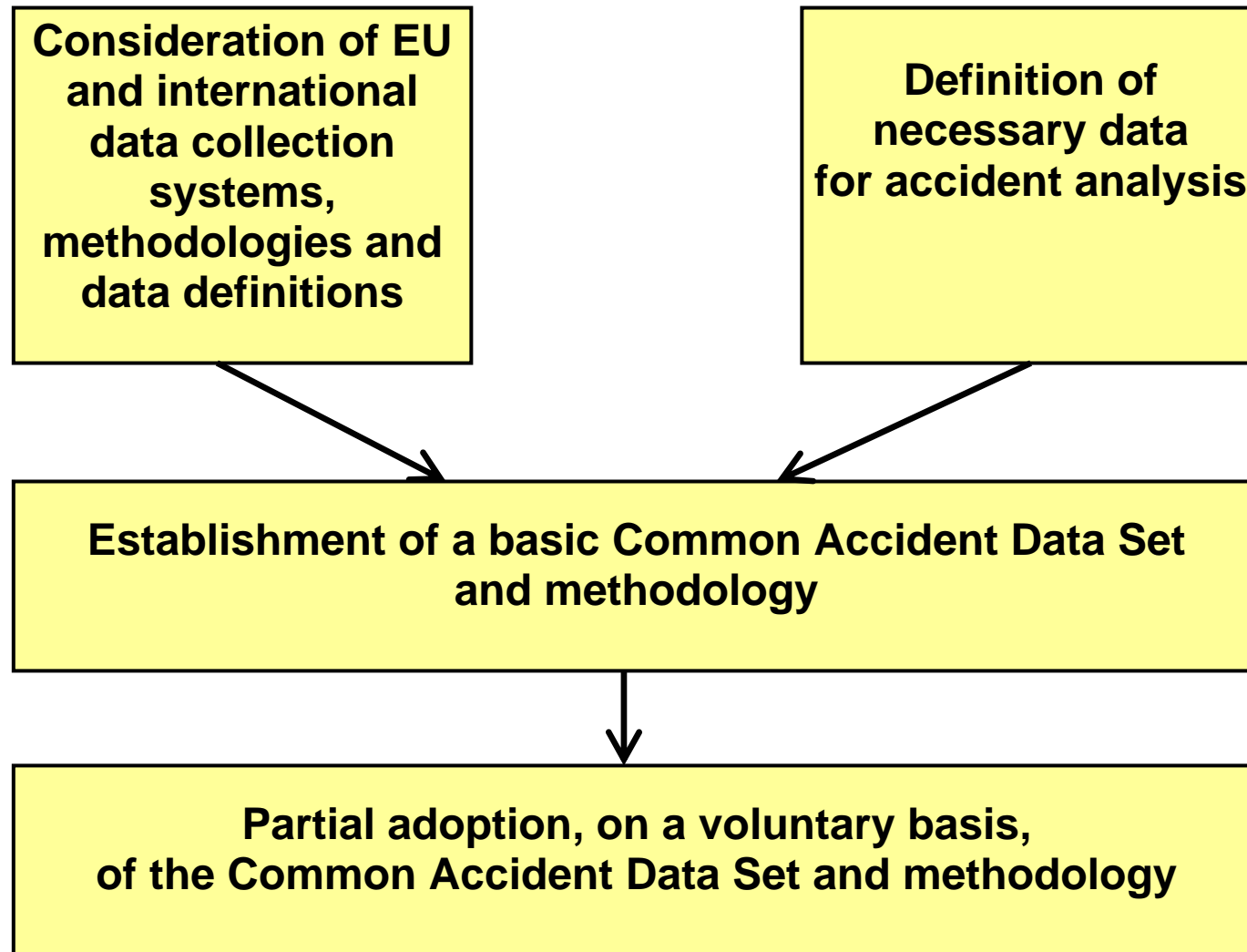
THE CADaS PARTNERS
Coordination by NTUA

Identification of needs & Inventory of national systems	Preparation of variables and values	Commenting CADaS
- SafetyNet Task 1.4 partners: (NTUA, TRL, KfV, SWOV, DRD, CDV, KTI, VSRC, INTRAS)	Accident variables: **SWOV** Road variables: **NTUA** Vehicle variables: **TRL**	- SafetyNet Task 1.4 partners: (NTUA, TRL, KfV, SWOV, DRD, CDV, KTI, VSRC, INTRAS)
- CARE Experts group	Person variables: **KfV**	- CARE Experts group
- The EC Road Safety Unit	Review of each part, synthesis and compilation into the CADaS proposal: **NTUA**	- The EC Road Safety Unit

CURRENT AND FUTURE PROCESSES
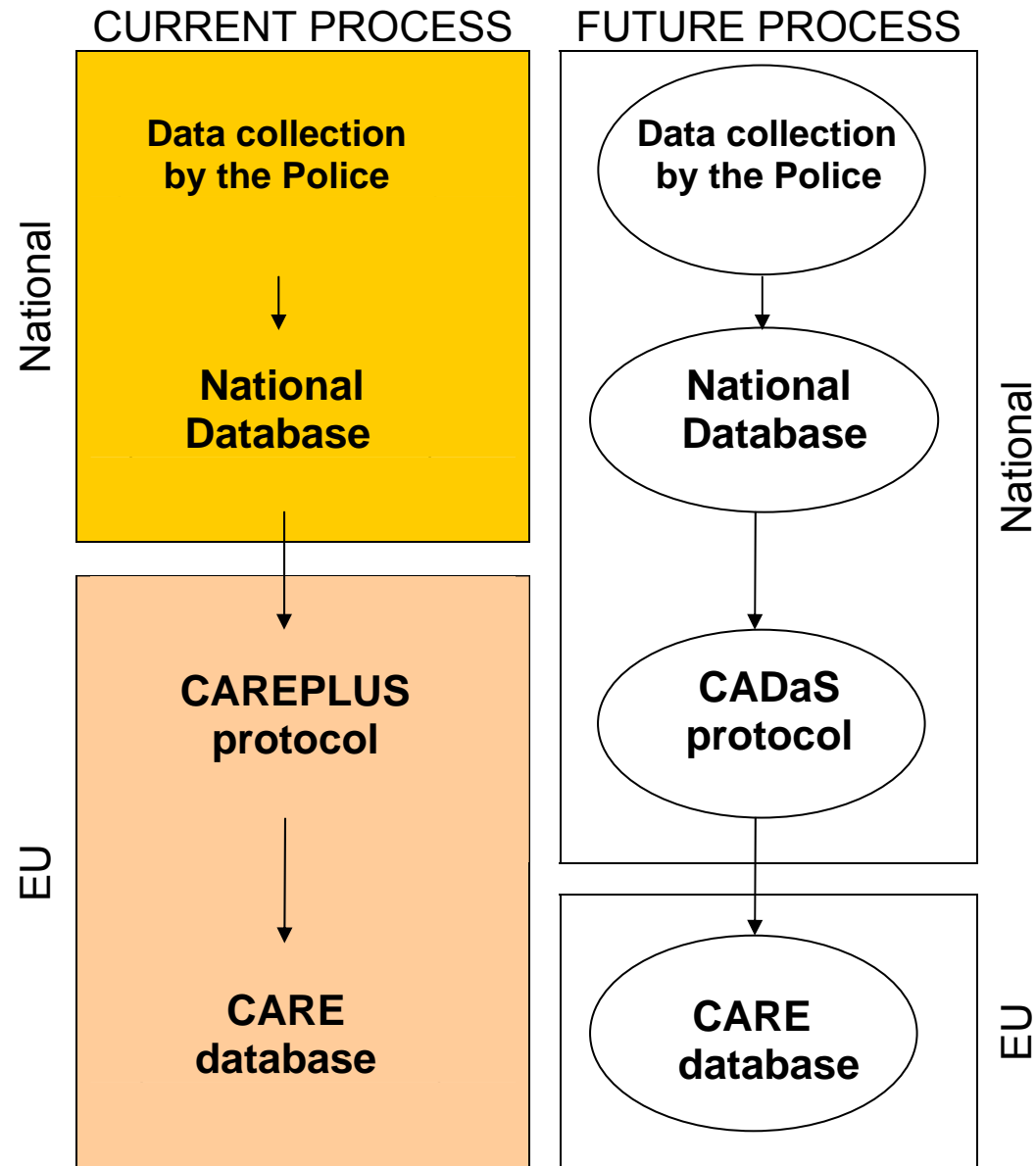
THE CARE AND CADaS SYSTEMS

CAREPLUS
(data transformed at EU level)

National data are sent to the EC without any elaboration.
The EC applies transformation rules in order to transform them into the CAREPLUS common definition values.

55 Variables and 255 Values

CADaS
(data transformed at national level)

National data are further processed and transformed in accordance to the CADaS definitions and structure (record layout) in each country.
Then, each country transmits the CADaS data to the EC.

88 Variables and 481 Values

Almost all CAREPLUS values are included in the CADaS

CADaS IS A SUPERSET OF CAREPLUS

CAREPLUS experience was exploited in order to find the optimum structure for the CADaS protocol;

- Variables and values,

- Definitions,

- Data formats,

already being used in the CAREPLUS system are exploited in the CADaS.

SCOPE

- The **C**ommon **A**ccident **Da**ta **S**et (**CADaS**) allows for comparable road accident data to be available in Europe, as is the case at Federal level in the United States of America (MMUCC).

- The **CADaS** system will be implemented by the EU Member States:
  - on a voluntary basis
  - in pieces ("a la carte" system)
  - gradually

PURPOSE

- CARE will contain increasingly more compatible and comparable data.

- More common road accident data from the EU countries will be available to the European Road Safety Community.

OPTIONAL ADJUSTMENTS OF THE NATIONAL SYSTEMS

- EU countries continue using their national accident data collection systems. They collect data in the way they find it more suitable (manually, electronically, links with other databases, etc.).

- Whenever they wish they can implement adjustments in order to be able to transform data according to the CADaS protocol and provide to the EU more data compatible throughout Europe.

- The EU countries can choose to adopt as many CADaS variables and values as they wish.

- The CADaS is structured in a simple way, without levels of hierarchy, constituting in fact the **record layout of the data set to be transferred to the EU**

SELECTION CRITERIA FOR CADaS VARIABLES AND VALUES

1. **Variables and values must be useful** for road accident analysis, especially at EU level.

2. **The level of detail of the variables and values** corresponds to all data useful for macroscopic data analysis and not for detailed reconstruction of the scene of the accident, which is of local interest.

3. Each country should have the possibility to choose **alternative level of detail** of the various values.

4. **Variables and values must be comprehensive and concise**. Each variable must include description and scope (importance to road safety), attribute values and their definitions and the data format.

SELECTION CRITERIA FOR CADaS VARIABLES AND VALUES (2)

5. **Data which are impossible or very difficult to be collected** are not retained in the CADaS, independently of their value for road accident analysis.

6. **The future perspective** of using certain variables and values was taken into account, even though those data are not currently collected by most of the countries due to current technical difficulties (i.e. latitude and longitude of the accident location, etc.)

7. **Existing variables and values of CAREPLUS** are of first priority within CADaS

8. CADaS variables and values **refer to casualty road accidents**; material damage-only accidents are not considered.

VARIABLE CATEGORIES

The **CADaS** variables are divided into four basic categories, identified by a unique letter (code) at the beginning of the name of the respective variable:

A, for **Accident** related variables,

R, for **Road** related variables,

V, for **Vehicle** related variables,

P, for **Person** related variables

Example: **A-2   ACCIDENT DATE**

VARIABLE RATING

At a first stage, each country can adopt (if they wish) only a subset of variables of the CADaS. This selection can be based on the importance of the recommended variables.

For that reason, all variables were separated into two broad categories, according to their importance for road accident analysis, as estimated by the WP1 partners:

- Variables of high importance (H)

- Variables of lower importance (L)

VARIABLE COMPONENTS

Variable Label:

- Section identifier (A, R, V or P)
- Numbering and Name
- Variable rating (H or L)

Variable definition and scope:

- Variable definition
- Brief description
- Importance and usefulness (rational lying behind its selection)

Values list

VALUE COMPONENTS

Value Labels:

Each value is further identified by the code of the variable, followed by a number which corresponds to each value and its name.

Value definitions:

The definition of each value is given, indicating also any particularities and any relevant assumptions regarding its collection.

Data format, concerning:

- The possibility to attribute one or more values to a variable
- The format of the value (number of digits, decimal places etc)

DATA FORMATS

The format of each variable included in the CADaS can vary, depending on the data collection needs

Various data formats were considered:

- Single numbers, corresponding to specific values
  (e.g. "1" corresponding to "driver"),

- Numbers with a straightforward meaning (date, age, engine power etc),

- Multiple numbers (each corresponding to a specific value), adopted in cases where several choices can be made,

- Codes (using a relevant value list, and the respective codes), e.g. Eurostat NUTS or E-road codes.

VALUE CATEGORIES

- For each category, two main distinct types are defined (according to the detail in which these data can be obtained):

  1. **Detailed:** concern information at the highest level of detail.

  2. **Alternative:** concern information of a more aggregate level of detail, when more detailed values are not available.

Especially for alternative values, the A identifier is used (e.g. AA, RA, VA, PA),

EXAMPLE OF ALTERNATIVE VALUES

Variable: NATIONALITY

Values:

Detailed:
P-6 Nationality (one code corresponding to each country)

Alternative:
PA-6.51 National
PA-6.52 Foreigner
PA-6.59 Unknown

The detailed value indicates the person nationality at a disaggregate level (country code).

If the person nationality is not available at this level of detail, one of the alternative (aggregate) values can be selected.

SUMMARY OF CADaS VARIABLES

Variable category	Code	Number of Variables			Number of Values		
		High (H) importance	Lower (L) importance	Total	Detailed values	Alternative values (A)	Total
Accident	**A**	7	5	12	76	15	91
Road	**R**	16	21	37	151	15	166
Vehicle	**V**	7	10	17	110	7	117
Person	**P**	15	7	22	96	11	107
Total		45	43	**88**	433	48	**481**

88 VARIABLES IN FOUR FILES

ACCIDENT INFORMATION

A-1	Accident ID
A-2	Accident Date
A-3	Accident Time
A-4	NUTS
A-5	LAU
A-6	Accident Severity
A-7	Weather Conditions
A-8	Accidents with pedestrians
A-9	Accidents with parked vehicles
A-10	Single vehicle accidents
A-11	At least two vehicles - no turning
A-12	At least two vehicles - turning or crossing

ROAD INFORMATION

R-1	Accident ID
R-2	Accident Location - Latitude
R-3	Accident Location - Longitude
R-4	E-Road
R-5	E-Road Kilometre
R-6	Road Functional Class - First Road
R-7	Road Functional Class - Second Road
R-8	Average Annual Daily Traffic - First Road
R-9	Average Annual Daily Traffic - Second Road
R-10	Speed Limit - First Road
R-11	Speed Limit - Second Road
R-12	Motorway
R-13	Urban Area
R-14	Light Conditions
R-15	Junction
R-16	Accident At Junction
R-17	At-Grade Junction Type
R-18	Relation To The At-Grade Junction
R-19	Relation To The Interchange
R-20	Junction Control
R-21	Road Surface Conditions
R-22	Roadside Obstacles
R-23	Carriageway Type
R-24	Single Carriageway Type
R-25	Number Of Lanes
R-26	Traffic Lane Width
R-27	Emergency Lane
R-28	Road Markings
R-29	Work Zone Related
R-30	Relation To The Work Zone
R-31	Work Zone - Type Of Works
R-32	Road Curvature
R-33	Road Curvature Radius
R-34	Road Curvature Length
R-35	Road Curvature Superelevation
R-36	Road Segment Grade
R-37	Grade

VEHICLE INFORMATION

V-1	Accident ID
V-2	Vehicle ID
V-3	Vehicle Type
V-4	Vehicle Special Function
V-5	Trailer
V-6	Engine Power
V-7	Active Safety Equipment
V-8	Vehicle Drive
V-9	Make
V-10	Registration Year
V-11	Vehicle Manoeuvre
V-12	First Point Of Impact
V-13	First Object Hit In Carriageway
V-14	First Object Hit Off Carriageway
V-15	Vehicle Insurance for Driver/Rider
V-16	Hit & Run
V-17	Registration Country

PERSON INFORMATION

P-1	Accident ID
P-2	Vehicle ID
P-3	Person ID
P-4	Date Of Birth
P-5	Gender
P-6	Nationality
P-7	Injury Type
P-8	Road User Type
P-9	Alcotest
P-10	Alcotest Sample Type
P-11	Alcotest Result
P-12	Alcohol Level
P-13	Drug Test
P-14	Drug Test Result
P-15	Driving License Issue Date
P-16	Driving License Validity
P-17	Safety Equipment
P-18	Seating Position In/On Vehicle
P-19	Driver Distracted By Device
P-20	Psychophysical / Physical Impairment Or Condition
P-21	Trip / Journey Purpose
P-22	Pedestrian Movement

ACCIDENT TYPE SKETCHES (CAREPLUS LEVEL 3)

Pedestrian crossing street outside a junction

Pedestrian crossing street at a junction

Hitting pedestrian - turning right (left)

Hitting pedestrian - turning left (right)

Pedestrian in the road

Pedestrian walking along the road

Pedestrians on pavement or bicycle lane

Hitting parked vehicles right (left) side of the road

Hitting parked vehicles left (right) side of the road

Single vehicle accident - Leaving straight road - either side of the road

Single vehicle accidents on the road

Single vehicle accidents in a bend - going either side of the road

Single vehicle accidents In junctions or entrances

Single vehicle accidents - others

Single vehicle accidents with animals

Single vehicle accidents with obstacles on or above the road

Single vehicle accidents with roadwork materials

Accidents between train and vehicle

Single vehicle accidents with obstacles - others

At least two vehicles - same direction - overtaking

At least two vehicles - same direction - rear end collisions

At least two vehicles - same direction - entering traffic

At least two vehicles - same direction - side collision

At least two vehicles - same direction - U-turn in front of other vehicle

At least two vehicles - same direction - others

At least two vehicles - head on collision in general

At least two vehicles - U-turn in front of other vehicle

At least two vehicles - opposite direction no turning - reversing

At least two vehicles - opposite direction no turning - others

At least two vehicles - turning or crossing - same road - same direction - rear end collision

At least two vehicles - turning or crossing - same road - same direction - turning right (left)

At least two vehicles - turning or crossing - same road - same direction - turning left (right)

At least two vehicles - turning or crossing - same road - same direction - others

At least two vehicles - same road - opposite direction - turning left (right) in front of other vehicle

At least two vehicles - same road - opposite direction - turning into same road

At least two vehicles - same road - opposite direction - turning into opposite roads

At least two vehicles - same road - opposite direction - turning right (left) in front of other vehicle

At least two vehicles - same road - opposite direction - turning others

At least two vehicles - different roads - turning right (left) in front of vehicle from the left (right)

At least two vehicles - different roads - turning right (left) - head on collision

At least two vehicles - different roads - turning right (left) - head on collision

At least two vehicles - different roads - both vehicles turning

At least two vehicles - different roads - turning left (right) into traffic from the right (left) side

At least two vehicles - different roads - turning left (right) into traffic from the left (right) side

At least two vehicles - different roads - turning into traffic - others

ACCIDENT RELATED VARIABLES

A-1 ACCIDENT ID	H	xxxxxxxxx

A-2 ACCIDENT DATE	H
Date	xxxxxxx
Unknown	99999999

A-3 ACCIDENT TIME	H
Time	xxxx
Unknown	9999

A-4 NUTS	H
NUTS 3	code
NUTS 2 (A)	code
NUTS 1 (A)	code
Unknown	99...9

A-5 LAU	H
LAU 2	code
LAU 1 (A)	code
Unknown	99...9

A-6 ACCIDENT SEVERITY	H
Fatal	01
Serious injury	02
Slight injury	03
Injury (A)	51
Unknown	99

A-7 WEATHER CONDITIONS	H
Dry/Clear	01
Rain	02
Snow	03
Fog, Mist, Smoke	04
Sleet, Hail	05
Severe Winds	06
Other	07
Unknown	99

ACCIDENT TYPE (Variables A-8 - A-12 refer to corresponding sketches)

A-8 ACCIDENTS WITH PEDESTRIANS	L
Not applicable	00
Pedestrian crossing street - no turning of vehicle - outside a junction	01
Pedestrian crossing street - no turning of vehicle - at a junction	02
Pedestrian crossing street - no turning of vehicle - not specified (A)	51
Pedestrians crossing - turning of vehicle - turning right (left)	03
Pedestrians crossing - turning of vehicle - turning left (right)	04
Pedestrians crossing - turning of vehicle - not specified (A)	52
Pedestrian stationery in the road	05
Pedestrian walking along the road	06
Pedestrians on pavement or bicycle lane	07
Pedestrian walking along the road or stationary in the road (A)	53
Pedestrian others	08

A-9 ACCIDENTS WITH PARKED VEHICLES	L
Not applicable	00
Hitting parked vehicles right (left) side of the road	01
Hitting parked vehicles left (right) side of the road	02
Hitting parked vehicles-side of the road-not specified (A)	51
Accidents with parked vehicles - opening doors	03
Other accidents with parked vehicles	04

ACCIDENT RELATED VARIABLES (2)

A-10 SINGLE VEHICLE ACCIDENTS	L
Not applicable	00
With animals	01
With obstacles on or above the road	02
With roadwork materials	03
Accidents between train and vehicle	04
With obstacles - others	05
With obstacles on the road - not specified (A)	51
Leaving straight road - either side of the road	06
On the road	07
In a bend - going either side of the road	08
In junctions or entrances	09
Without obstacles - others	10
Without obstacles on the road (A)	52

A-11 AT LEAST TWO VEHICLES - NO TURNING	L
Not applicable	00
Same direction - overtaking	01
Same direction - rear end collisions	02
Same direction - entering traffic	03
Same direction - side collision	04
Same direction - U-turn in front of vehicle	05
Same direction - others	06
Same direction no turning - not specified (A)	51
Head on collision in general	07
U-turn in front of other vehicle	08
Opposite direction no turning - reversing	09
Opposite direction no turning - others	10
Opposite direction no turning - not specified (A)	52
Others no turning	11

A-12 AT LEAST TWO VEHICLES - TURNING OR CROSSING	L
Not applicable	00
Same road - same direction - rear end collision	01
Same road - same direction - turning right (left)	02
Same road - same direction - turning left (right)	03
Same road - same direction - others	04
Same road - same direction - not specified (A)	51
Same road - opposite direction - turning left (right) in front of other vehicle	05
Same road - opposite direction - turning into same road	06
Same road - opposite direction - turning into opposite roads	07
Same road - opposite direction - turning right (left) in front of other vehicle	08
Same road - opposite direction - turning others	09
Same road - opposite direction - not specified (A)	52
Crossing (no turning) - different roads	10
Different roads - turning right (left) in front of vehicle from the left (right)	11
Different roads - turning right (left) - head on collision	12
Different roads - both vehicles turning	13
Different roads - turning left (right) into traffic from the right (left) side	14
Different roads - turning left (right) into traffic from the left (right) side	15
Different roads - turning into traffic - others	16
Turning - different roads - not specified (A)	53
Crossing or turning - others	17

**Alternative (A) values
in variables A-8 - A-12
are of high priority (H)**

ROAD RELATED VARIABLES

R-1 ACCIDENT ID	H
Accident ID	xxxxxxxxxx

R-2 LATITUDE	L
Latitude	xx.xxxxx
Unknown	9999999

R-3 LONGITUDE	L
Longitude	xx.xxxxx
Unknown	9999999

R-4 E-ROAD	L
Not applicable	000
E-road number	xxx
Unknown	999

R-5 E-ROAD KILOMETRE	L
Not applicable	0000
E-road kilometre	xxxx
Unknown	9999

R-6 ROAD FUNCTIONAL CLASS - FIRST ROAD	H
Principal arterial	01
Secondary arterial	02
Collector	03
Local	04
Other	05
Unknown	99

R-7 ROAD FUNCTIONAL CLASS - SECOND ROAD	H
Not applicable	00
Principal arterial	01
Secondary arterial	02
Collector	03
Local	04
Other	05
Unknown	99

R-8 AVERAGE ANNUAL DAILY TRAFFIC - FIRST ROAD	L
A.A.D.T.	xxxxxx
Unknown	999999

R-9 AVERAGE ANNUAL DAILY TRAFFIC - SECOND ROAD	L
Not applicable	000000
A.A.D.T.	xxxxxx
Unknown	999999

R-10 SPEED LIMIT - FIRST ROAD		H
Speed limit		xxx
Unknown		999
<30 km/h	(A)	501
30-50 km/h	(A)	502
51-80 km/h	(A)	503
81-100 km/h	(A)	504
101 - 120 km/h	(A)	505
>120 km/h	(A)	506

R-11 SPEED LIMIT - SECOND ROAD		H
Not applicable		000
Speed limit		xxx
Unknown		999
<30 km/h	(A)	501
30-50 km/h	(A)	502
51-80 km/h	(A)	503
81-100 km/h	(A)	504
101 - 120km/h	(A)	505
>120 km/h	(A)	506

ROAD RELATED VARIABLES (2)

R-12 MOTORWAY	H
Yes	01
No	02
Unknown	99

R-13 URBAN AREA	H
Inside	01
Outside	02
Unknown	99

R-15 JUNCTION	H
Yes	01
No	02
Unknown	99

R-17 AT GRADE JUNCTION TYPE	H
Not applicable	00
Crossroad	01
Roundabout	02
T or staggered junction	03
Multiple junction	04
Other	05
Unknown	99

R-14 LIGHT CONDITIONS	H
Daylight	01
Twilight	02
Darkness street lights lit	03
Darkness street lights unlit	04
Darkness no street lights	05
Unknown	99

R-16 ACCIDENT AT JUNCTION	H
Not applicable	00
At grade	01
Interchange	02
Unknown	99

R-18 RELATION TO THE AT GRADE JUNCTION	L
Not applicable	00
Approaching (20m)	01
Acceleration / decelerration lanes	02
Thru roadway (on intersection)	03
Crossover related	04
Intersection	05
Unknown	99

R-19 RELATION TO THE INTERCHANGE	L
Not applicable	00
Approaching (20m)	01
Acceleration / decelerration lanes	02
On-off ramp	03
Thru roadway (on interchange)	04
Intersection	05
Unknown	99

R-20 JUNCTION CONTROL	L
Not applicable	00
Authorised person	01
Give way signs or markings/stop sign	02
Automatic traffic signals	03
Uncontrolled	04
Other	05
Unknown	99

R-21 ROAD SURFACE CONDITIONS		H	
Dry	01	Flood	06
Frost, ice	02	Other	07
Slippery	03	Unknown	99
Snow,slush	04	Snow, Ice (A)	51
Wet,damp	05	Snow, frost or ice (A)	52

ROAD RELATED VARIABLES (3)

R-22 ROADSIDE OBSTACLES	L
Yes	01
No	02
Unknown	99

R-23 CARRIAGEWAY TYPE	H
Single carriageway	01
Dual carriageway	02
Unknown	99

R-24 SINGLE CARRIAGEWAY TYPE	H
Not applicable	00
One way street	01
Two way street	02
Unknown	99

R-25 NUMBER OF LANES	H
Nr of lanes	xx
Unknown	99

R-26 TRAFFIC LANE WIDTH	L
Traffic lane width	xxxx
Unknown	9999

R-27 EMERGENCY LANE	L
Yes	01
No	02
Unknown	99

R-28 ROAD MARKINGS	L
None	01
Centerline skip-dash	02
Centerline solid,single	03
Centerline solid,double	04
Lane line skip-dash	05
Lane line solid	06
Edge line left	07
Edge line right	08
Turn arrow symbols (right, left, combination)	09
Other	10
Unknown	99

R-29 WORK ZONE RELATED	H
Yes	01
No	02
Unknown	99

R-31 TYPE OF WORKS	L
Not applicable	00
Lane closure	01
Lane shift / crossover	02
Work on shoulder or median	03
Intermittent or moving work	04
Other	05
Unknown	99

R-30 RELATION TO THE WORK ZONE	L
Not applicable	00
Before the boundaries of the work zone	01
Transition area	02
Activity area	03
Termination area	04
Unknown	99
Inside the work zone (A)	51

R-32 ROAD CURVATURE	L
Yes	01
No	02
Unknown	99

R-34 ROAD CURVATURE LENGTH	L
Not applicable	0000
Length	xxxx
Unknown	9999

R-36 ROAD SEGMENT GRADE	L
Yes	01
No	02
Unknown	99

R-33 ROAD CURVATURE RADIUS	L
Not applicable	0000
Radius	xxxx
Unknown	9999

R-35 ROAD CURVATURE SUPERELEVATION	L
Not applicable	000
Superelevation	xxx
Unknown	999

R-37 GRADE	L
Not applicable	000
Rise (or fall) per 100 meters	xxx
Unknown	999

VEHICLE RELATED VARIABLES

V-1 ACCIDENT ID	H	xxxxxxxxx

V-2 VEHICLE ID	H	xx

V-5 TRAILER		L
Without trailer		01
With trailer		02
Unknown		99

V-3 VEHICLE TYPE		H
Pedal cycle		01
Moped		02
Motorcycle		03
Passenger car		04
Minibus		05
Bus		06
Coach		07
Trolley		08
Goods vehicle under 3.5t		09
Goods vehicle over 3.5t		10
Road tractor		11
Agricultural tractor		12
Tram/light rail		13
Ridden animal		14
Other motor vehicle		15
Other non-motor vehicle		16
Unknown		99
Motorcycle or moped	(A)	51
Bus or coach or trolley	(A)	52
Goods vehicle	(A)	53

V-4 VEHICLE SPECIAL FUNCTION		L
No special function		01
Taxi		02
SUV / off road vehicle		03
Vehicle used as school bus		04
Vehicle used as other bus		05
Military		06
Police		07
Ambulance		08
Fire truck		09
Dangerous goods vehicle		10
Unknown		99
Vehicle used as bus	(A)	51
Special vehicle	(A)	52

V-6 ENGINE POWER		H
Power		xxx
Unknown		999

V-7 ACTIVE SAFETY EQUIPMENT		L
Not applicable		00
Yes		01
No		02
Unknown		99

V-9 MAKE		L
Make		xxx
Unknown		999

V-8 VEHICLE DRIVE		L
Not applicable		00
Left hand drive		01
Right hand drive		02
Unknown		99

V-10 REGISTRATION YEAR		H
Year		xxxx
Unknown		9999

VEHICLE RELATED VARIABLES (2)

V-11 VEHICLE MANOEUVRE			H
Reversing	01	Turning right	12
Parked	02	Changing lane to left	13
Entering a parking position	03	Changing lane to right	14
Leaving a parking position	04	Avoidance manoeuvre	15
Waiting to go ahead but held up	05	Overtaking vehicle on its left	16
Slowing or stopping	06	Overtaking vehicle on its right	17
Moving off	07	Going round left hand bend	18
U turn	08	Going round right hand bend	19
Waiting to turn left	09	Going ahead not at bend	20
Turning left	10	Other	21
Waiting to turn right	11	Unknown	99

V-12 FIRST POINT OF IMPACT	L
Left front	01
Center front	02
Right front	03
Right side	04
Right rear	05
Center rear	06
Left rear	07
Left side	08
Unknown	99
Front - not specified (A)	51
Rear - not specified (A)	52

V-13 FIRST OBJECT HIT IN CARRIAGEWAY	L
None	01
Object from previous accident	02
Parked vehicle	03
Bridge	04
Bollard/refuge	05
Central island of roundabout	06
Kerb	07
Animal (except ridden animal)	08
Other object	09
Unknown	99

V-14 FIRST OBJECT HIT OFF CARRIAGEWAY	L
None	01
Road sign/traffic signal	02
Lamp post	03
Pole	04
Tree	05
Bus stop/shelter	06
Central crash barrier	07
Crash barrier beside carriageway	08
Ditch	09
Completely submerged in water	10
Other permanent object	11
Unknown	99

V-15 INSURANCE	L
Not applicable	00
Insured for vehicle	01
Not insured for vehicle	02
Unknown	99

V-16 HIT & RUN	L
Not Hit & Run	01
Hit & Run	02
Unknown	99

V-17 REGISTRATION COUNTRY	H
National	01
Foreign	02
Unknown	99

PERSON RELATED VARIABLES

P-1 ACCIDENT ID	H	xxxxxxxxx

P-2 VEHICLE ID	H	xx

P-3 PERSON ID	H	xx

P-6 NATIONALITY		H
Nationality code		xxx
National (A)		501
Foreigner (A)		502
Unknown (A)		509

P-4 DATE OF BIRTH		H
Date		xxxxxxx
Unknown		99999999
Age (A)		00000xxx

P-7 INJURY TYPE		H
Fatally injured		01
Seriously injured		02
Slightly injured		03
Not injured		04
Unknown		99
Injured (A)		51

P-5 GENDER		H
Male		01
Female		02
Unknown		99

P-8 ROAD USER TYPE		H
Driver		01
Passenger		02
Pedestrian		03
Unknown		99

P-11 ALCOTEST RESULT		H
Not applicable		00
Positive		01
Negative		02
Unknown		99

P-9 ALCOTEST		H
Not applicable		00
Tested		01
Not tested		02
Unknown		99

P-10 ALCOTEST SAMPLE TYPE		L
Not applicable		00
Blood sample		01
Breath sample		02
Unknown		99

P-12 ALCOHOL LEVEL		H
Not applicable		000
Level		xxx
Unknown		999

P-13 DRUG TEST		L
Not applicable		00
Tested		01
Not tested		02
Unknown		99

P-14 DRUG TEST RESULT		L
Not applicable		00
Positive		01
Negative		02
Unknown		99

P-16 DRIVING LICENSE VALIDITY		L
Not applicable		00
Appropriate driving license		01
Inappropriate driving license		02
Only driving lesson or driving test		03
Invalid or suspended driving license		04
No driving license		05
Not necessary for the vehicle driven		06
Unknown		99
Invalid or no driving license (A)		51

P-15 DRIVING LICENSE ISSUE DATE		H
Not applicable		000000
Year / month		xxxxx
Unknown		999999
Years and months of driving experience (A)		00xxxx

PERSON RELATED VARIABLES (2)

P-17 SAFETY EQUIPMENT	H
Seat belt worn no airbag in vehicle	01
Seat belt worn and airbag released	02
Seat belt worn and airbag not released	03
Crash helmet worn	04
Child safety seat facing forwards used	05
Child safety seat facing backwards used	06
No use of safety equipment (seat belt - helmet)	07
Other	08
Unknown	99
Seat belt worn - not specified　　　　(A)	51
Child safety seat used - not specified　　(A)	52

P-19 DRIVER DISTRACTED BY DEVICE	L
Not applicable	00
Not distracted by device	01
Telecommunication device	02
Other electronic device	03
Unknown	99

P-21 TRIP / JOURNEY PURPOSE	L
Route to school - education / work	01
Leisure	02
Holiday	03
Entertainment	04
Driving lesson	05
Other	06
Unknown	99

P-18 POSITION IN/ON VEHICLE	H
Not applicable	00
Driver	01
Front seat passenger	02
Rear seat passenger - seated	03
Rear seat passenger - standing	04
Elsewhere	05
Unknown	99

P-20 PSYCHOPHYSICAL / PHYSICAL IMPAIRMENT OR CONDITION	L
Not applicable	00
Good	01
Inattention / absence of mind / Worried	02
Tired / fall asleep	03
Illness / Sudden illness / Lost consciousness	04
Defective eyesight / hearing	05
Others	06
Unknown	99

P-22 PEDESTRIAN MOVEMENT	H
Not applicable	00
Crossing (on pedestrian crossing)	01
Crossing (on other point)	02
Walking on the carriageway, facing traffic	03
Walking on the carriageway, back to traffic	04
Standing or playing on the carriageway	05
Not on the carriageway	06
Unknown	99
Crossing　　　　　　　　　　(A)	51
Walking or standing on the carriageway　(A)	52

VARIABLE EXAMPLE

A-7 WEATHER CONDITIONS

Variable definition and scope

This variable defines the atmospheric conditions at the accident location at the time of the accident and allows for the identification of the impact of weather conditions to the road safety.

Values

A-7.01 Dry / Clear
A-7.02 Rain
A-7.03 Snow
A-7.04 Fog, Mist, Smoke
A-7.05 Sleet, Hail
A-7.06 Severe winds
A-7.07 Other
A-7.99 Unknown

Value definitions

A-7.01: Dry / Clear
    No hindrance from weather. Includes clear and cloudy sky.
A-7.02: Rain
    Heavy or light rain at the time of the accident.
A-7.03: Snow
    Snowing at the time of the accident.
A-7.04: Fog, Mist, Smoke
    Existence of fog or mist or smoke at the time of the accident.
A-7.05: Sleet, Hail
    Existence of sleet or hail at the time of the accident.
A-7.06: Severe winds
    Presence of winds deemed to have an adverse affect on driving conditions.
A-7.07: Other
    Other atmospheric conditions that affected the drivers or the road environment.
A-7.99: Unknown
    Atmospheric conditions not recorded or unknown.

Data format

More than one values can be selected. Each value is represented by a two digit number (e.g. 05).

CADaS ANNEXES

The CADaS uses comprehensive annexes
(diagrams, sketches, free text, value lists)

- Annex A: Junction at grade diagram
- Annex B: Interchange diagram
- Annex C: Work zone diagram
- Annex D: Accident type sketches
- Annex E: Vehicle Makes
- Annex F: Countries of the world
- Annex G: E-roads
- Annex H: List of variables and values