



Geneva

# WP.6 meeting

European Commission – DG MOVE

12-14 June 2018

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**European Commission**



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Mobility and  
Transport

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## CARE database

- The CARE data base is an EU initiative

Council Decision 93/704/EC on the creation of a Community database on road accidents.

## Data availability :

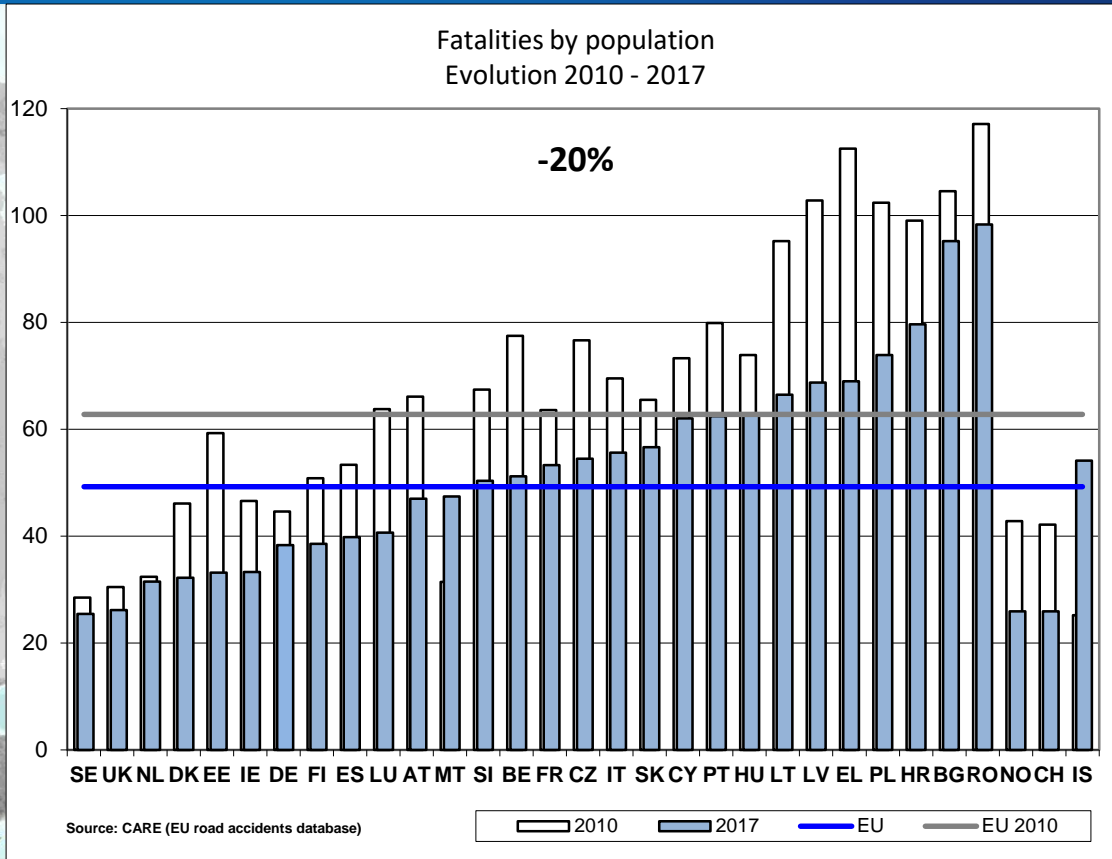
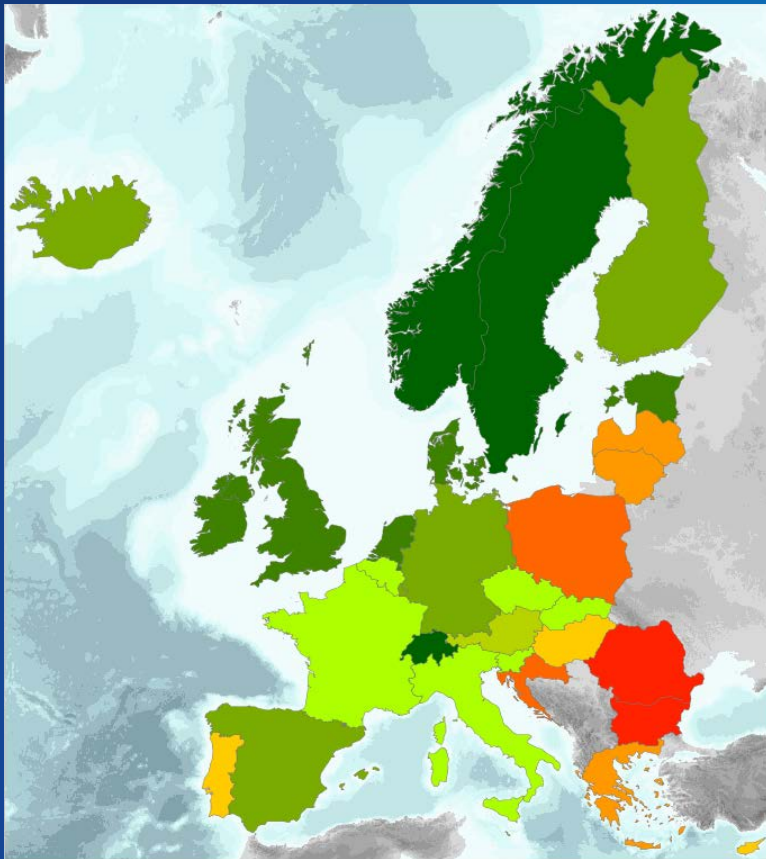
- **Time series ( 28 year )**
  - 1991 – 2014 for "old" EU Member states
  - 2001 – 2017 for new member states
- **Countries ( 32 )**
  - *EU countries*
  - *EFTA countries*

## Data on accidents reported by police

- Accidents : 46 Millions
  - On public roads with
  - At least one motor vehicle
  - At least one injured (material damage are not included)
- Vehicles involved ( 59 Millions)
- Persons involved ( 98 Millions)

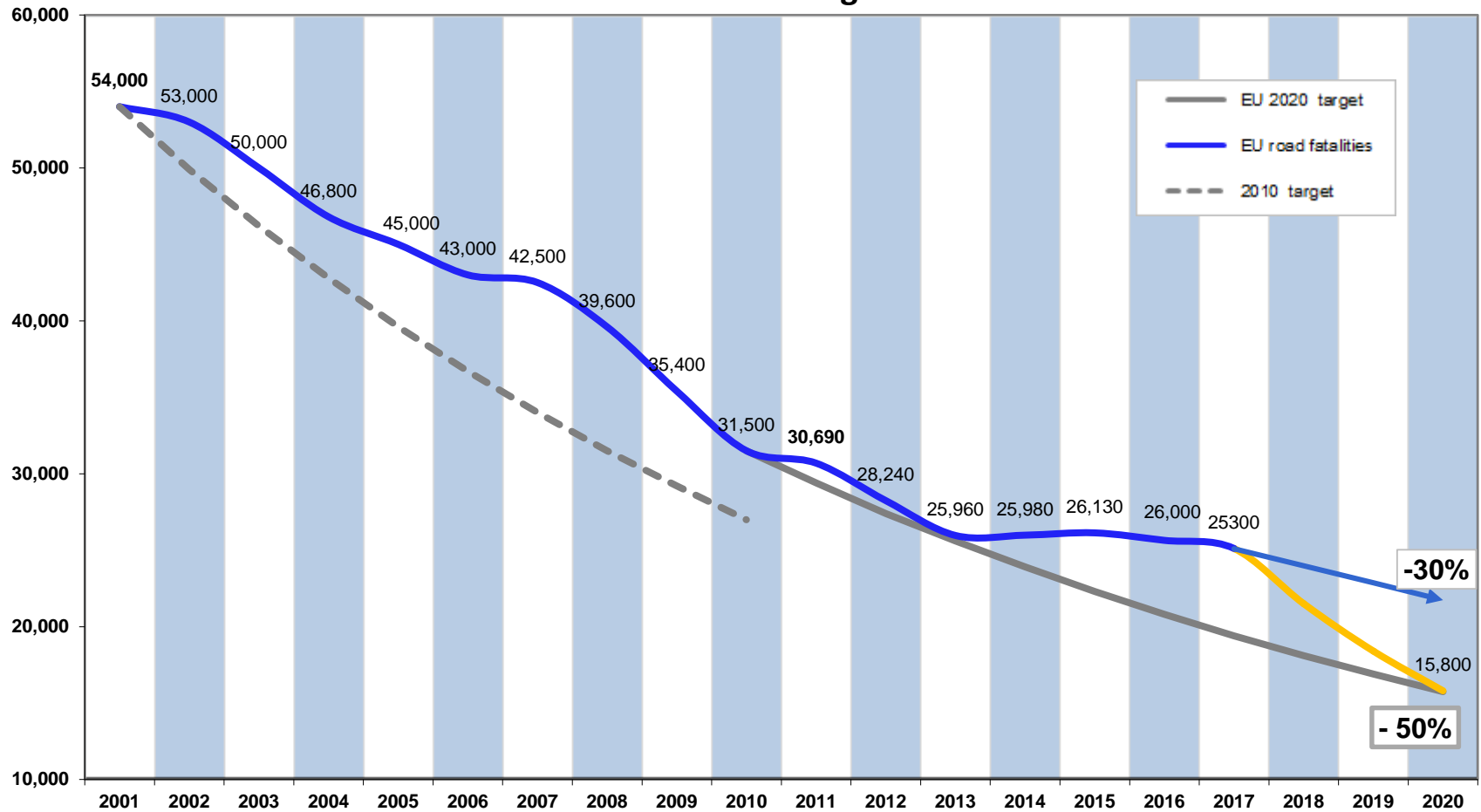


# Fatality rates 2017



# Road fatalities

## EU fatalities and targets 2010 - 2020

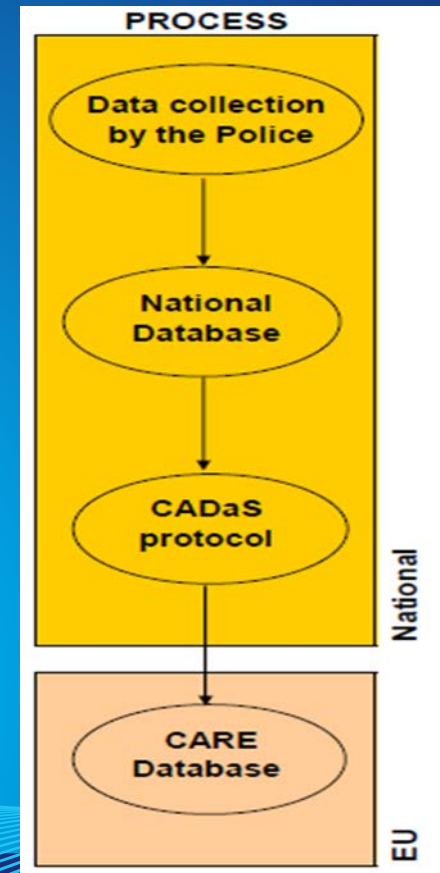




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## Data model: CADAS

- CaDAS is a standard model to report road accidents data for each accident on a common way ensuring high quality and homogeneity of the input data



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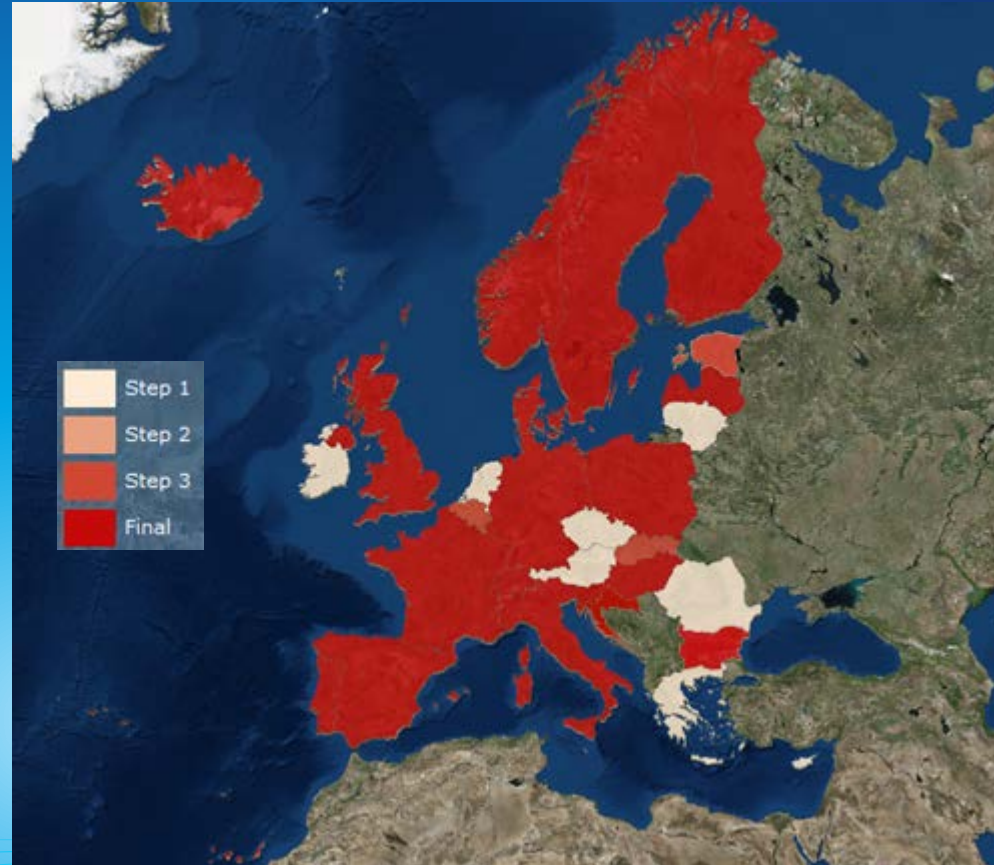


## CARE Update

# CADaS adoption : Status at 04.2018

- Status:
  - Final : 20 countries
  - On-going (step2 & 3):  
3 countries  
**BE (almost complete), EE, SK**
  - To be started (step 1):  
8 countries  
**AT, CY, CZ, EL, IE, LT, NL, RO**

→ please, switch to CADaS model for  
better data quality and variables  
harmonisation



# CADaS glossary



Directorate-General for Mobility and  
Transport

CARE DATABASE



Date: 03/06/2013  
Version: 3.3  
Authors: Verma Saurabh (European Dynamics Consultant for the European Commission-DG MOVE)  
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COMMON ACCIDENT DATA SET  
Reference Guide  
Version 3.2 - February 2013

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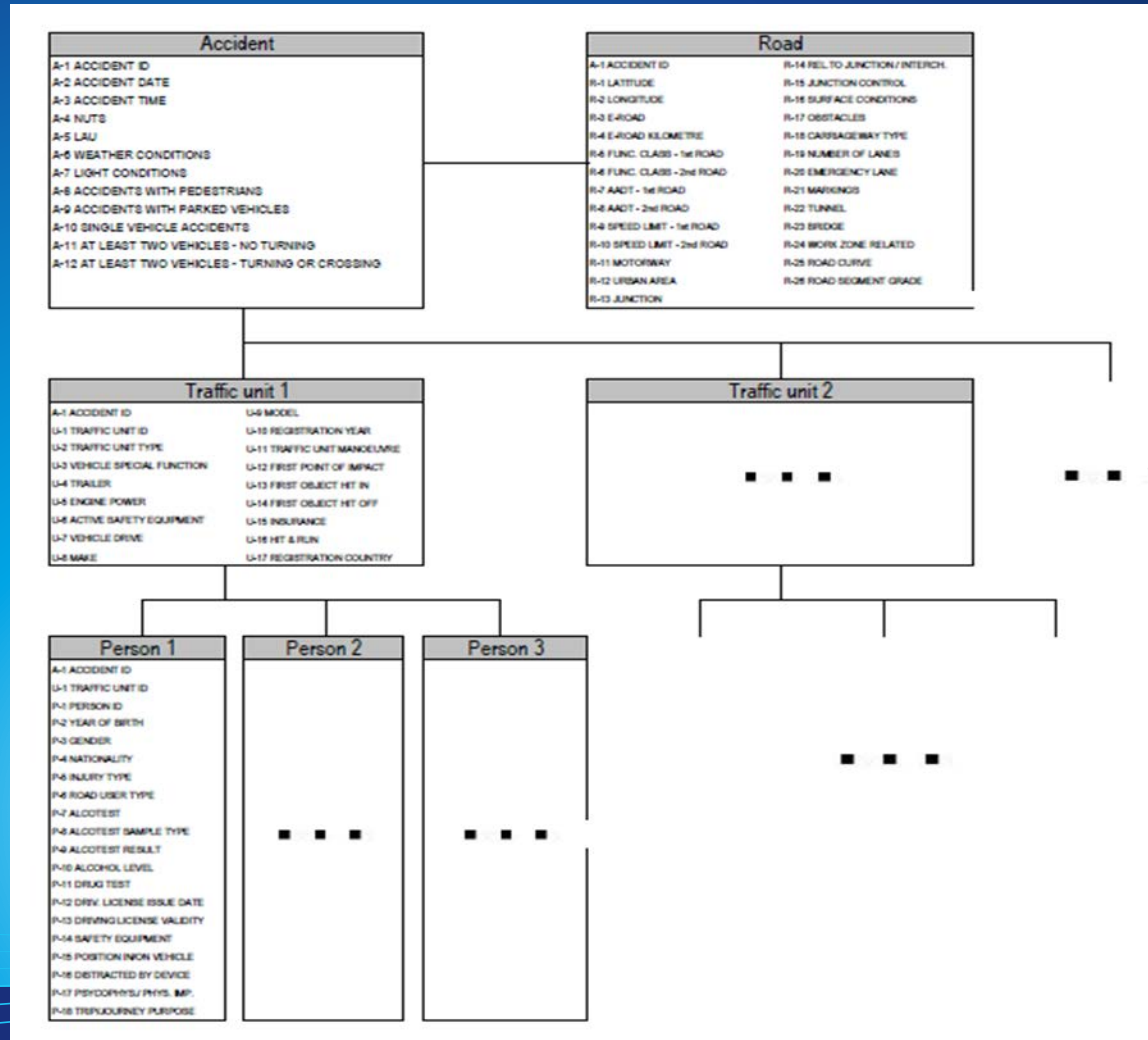
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# CADAS model:



# Reduce CADAS model:

ACCIDENT	
P *	AA_ACCIDENT_ID VARCHAR2 (15)
	AA_ACCDATE VARCHAR2 (8)
	AA_ACCTIME VARCHAR2 (4)
	AA_WEATHERCOND VARCHAR2 (2)
	AA_LIGHTCOND VARCHAR2 (2)
	AA_ACCTYPE VARCHAR2 (2)
	AR_LATITUDE VARCHAR2 (2)
	AR_LONGITUDE VARCHAR2 (2)
	AR_REGION_L1 VARCHAR2 (225)
	AR_REGION_L2 VARCHAR2 (225)
	AR_ROADTYPE VARCHAR2 (2)
	AR_SECTIONTYPE VARCHAR2 (2)
	AR_JUNCTIONTYPE VARCHAR2 (2)
	AR_SPEEDLIMIT VARCHAR2 (8)
	AR_SURFACECOND VARCHAR2 (2)
	INSDATE DATE
⇒ ACCIDENT_PK(AA_ACCIDENT_ID)	

REF_CADAS_CORE	
P *	REF_ENTITY VARCHAR2 (225)
P *	REF_VARNAME VARCHAR2 (225)
P *	REF_VARVALUECODE VARCHAR2 (225)
	REF_VARVALUEDESC VARCHAR2 (225)
	REF_VARVALUELVL VARCHAR2 (225)
	INSDATE DATE
⇒ REF_CADAS_CORE_PK(REF_ENTITY, REF_VARNAME, REF_VARVALUECODE)	

TRAFFIC_UNIT	
P *	TU_TRUNIT_ID VARCHAR2 (15)
PF *	AA_ACCIDENT_ID VARCHAR2 (15)
	TU_TRUNITYPE VARCHAR2 (2)
	TU_VEHSPCFNC VARCHAR2 (2)
	TU_REGYEAR VARCHAR2 (4)
	TU_REGCOUNTRY VARCHAR2 (3)
	TU_MANOEUVTYPE VARCHAR2 (2)
	INSDATE DATE
⇒ TRAFFIC_UNIT_PK(AA_ACCIDENT_ID, TU_TRUNIT_ID)	
⇒ TRAFFIC_UNIT_ACCIDENT_FK(AA_ACCIDENT_ID)	
⇒ TU_ACCIDENT_ID_IDX(AA_ACCIDENT_ID)	

PERSON	
P *	PE_PERSON_ID VARCHAR2 (15)
PF *	AA_ACCIDENT_ID VARCHAR2 (15)
PF *	TU_TRUNIT_ID VARCHAR2 (15)
	PE_BIRTHDATE VARCHAR2 (8)
	PE_NATIONALITY VARCHAR2 (3)
	PE_GENDER VARCHAR2 (2)
	PE_ROADUSERTYPE VARCHAR2 (2)
	PE_INJURYSEV VARCHAR2 (2)
	PE_ALCOTEST VARCHAR2 (2)
	PE_MAISINJSCA VARCHAR2 (2)
	INSDATE DATE

# Reduce CADAS model:

ACCIDENT				
Column name	Meaning	CADAS CORRESPONDENCE	Values	
1 AA_ACCIDENT_ID	Accident ID	A1	Year + country code + sequential number	
2 AA_ACCDATE	Date of accident	A2	YYYYMMDD	
3 AA_ACCTIME	Time of accident	A3	HH:MM	
4 AA_WEATHERCOND	Weather Conditions	A6	See CADAS glossary	
5 AA_LIGHTCOND	Light Conditions	A7	See CADAS glossary	
6 AA_ACCYPE	Combines Accident Types (w Pedestrian / w Parked veh / Single / Two veh turning / Two veh NO turnir	A8-A9-A10-A11-A12	Single, vehicle, with pedestrian, two or more vehicles, etc.	
7 AR_LATITUDE	X coordinate or Latitude	R1	See CADAS glossary	
8 AR_LONGITUDE	Y coordinate or Longitude	R2	See CADAS glossary	
9 AR_REGION_L1	Country Region (level 1) - text	A4	Text or Codes	
10 AR_REGION_L2	Country sub-Region (level 2) - Optional	A4	Text or Codes	
11 AR_ROADTYPE	Combines R5-Functional Class / R11-Motorway / R12-Urban Area	R5-R11-R12	Motorway, Expressway, National Road, Local Road, etc.	
12 AR_SECTIONTYPE	Type of Road Section - combines Emergency lane / Tunnel / Bridge / Road Curve / Segmen	R20-R22-R23-R25-R26	Bridge, Tunnel, Bend, Gradient, Straight, etc.	
13 AR_JUNCTIONTYPE	Junction Type	R13	See CADAS glossary	
14 AR_SPEEDLIMIT	Speed limit range	R9	0-30, 40-50, 50-70, 70-90, 90, 110, 120, 120-140, >140, no limits	
15 AR_SURFACECOND	Surface Conditions	R16	See CADAS glossary	

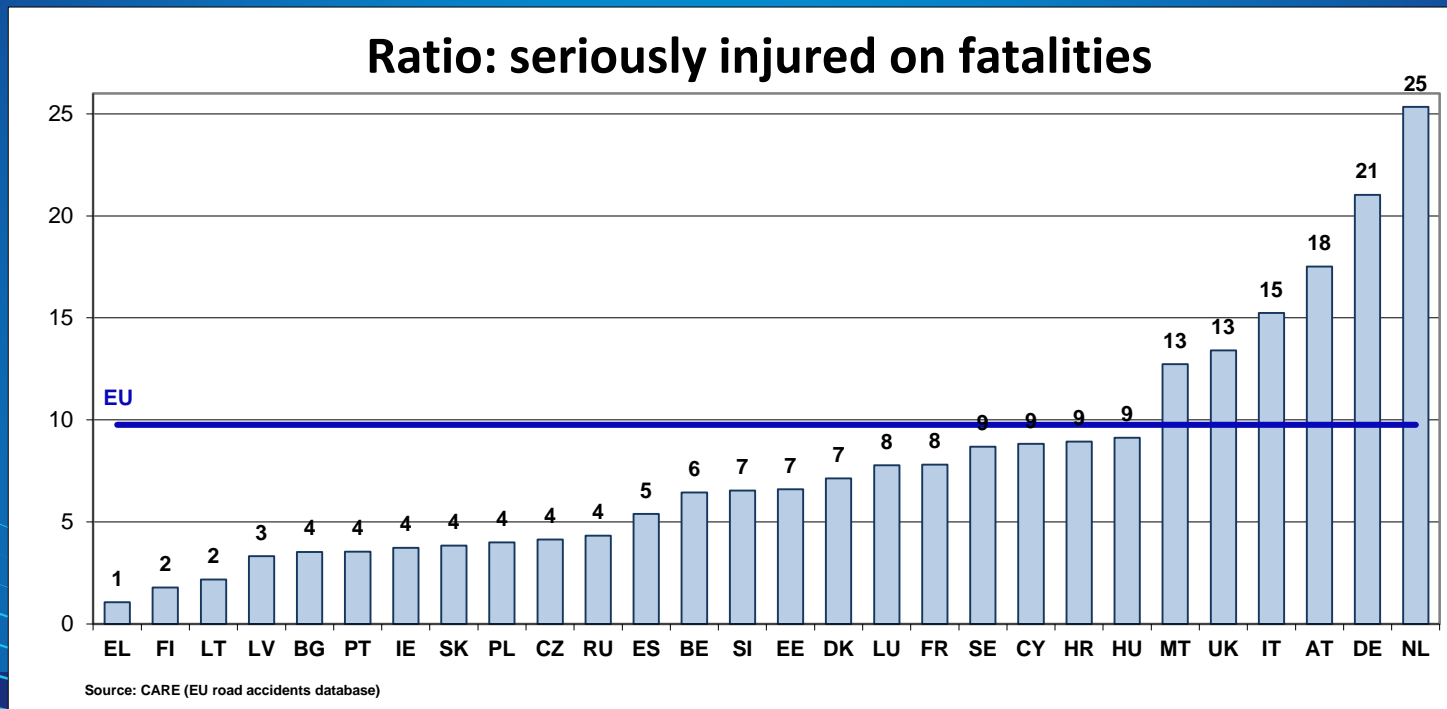
TRAFFIC UNIT				
Column name	Meaning	CADAS CORRESPONDENCE	Values	
1 AA_ACCIDENT_ID	Accident ID	A1	See Accident	
2 TU_TRUNIT_ID	Traffic Unit ID within the accident	U1	Sequential Number	
3 TU_TRUNITYPE	Traffic Unit Types + Pedestrian	U2	See CADAS glossary	
4 TU_VEHSPCFNC	Special Function of the Vehicle	U3	See CADAS glossary	
5 TU_REGYEAR	Vehicle Registration Year	U10	YYYY	
6 TU_REGCOUNTRY	Vehicle Registration Country Aggregated	U17	See CADAS Glossary (UA values: National, Foreign)	
7 TU_MANOEUVTYPE	Vehicle Manoeuvre	U11	See CADAS glossary (Turning, Overpassing, etc.)	

PERSON				
Column name	Meaning, values	CADAS CORRESPONDENCE	Values	
1 AA_ACCIDENT_ID	Accident ID	A1	See Accident	
2 TU_TRUNIT_ID	Traffic Unit ID within the accident	U1	See Traffic Unit	
3 PE_PERSON_ID	Person ID within the TU	P1	Sequential Number	
4 PE_BIRTHDATE	Date of birth YYYYMMDD	P2	YYYYMMDD	
5 PE_GENDER	Gender	P3	See CADAS glossary	
6 PE_ROADUSERTYPE	Road User Type	P6	See CADAS glossary	
7 PE_INJURYSEV	Injury Severity	P5	See CADAS glossary	
8 PE_ALCOATEST	Combines Alcohol Test variables	P7-P9	Not tested, Not Applicable, Positive, Negative, Unknown, Etc	
9 PE_NATIONALITY	Aggregated groups	P-4	See CADAS glossary (PA values: National, Foreigner EU, Foreigner outside EU, Foreigner unknown)	
10 PE_MAISINISCA	MAIS Injury Severity scale	P-19	See CADAS glossary	

# Seriously injured as reported by police

## Big differences between countries



## Description of the AIS and MAIS

The Abbreviated Injury Scale (AIS) severity score is on an ordinal scale of 1-6, with one indicating a minor injury and six being maximal (currently untreatable).

An AIS code of 9 is used to describe injuries where not enough information is available for more detailed coding.

The maximum AIS (MAIS) indicates the most severe injury that a patient sustains.

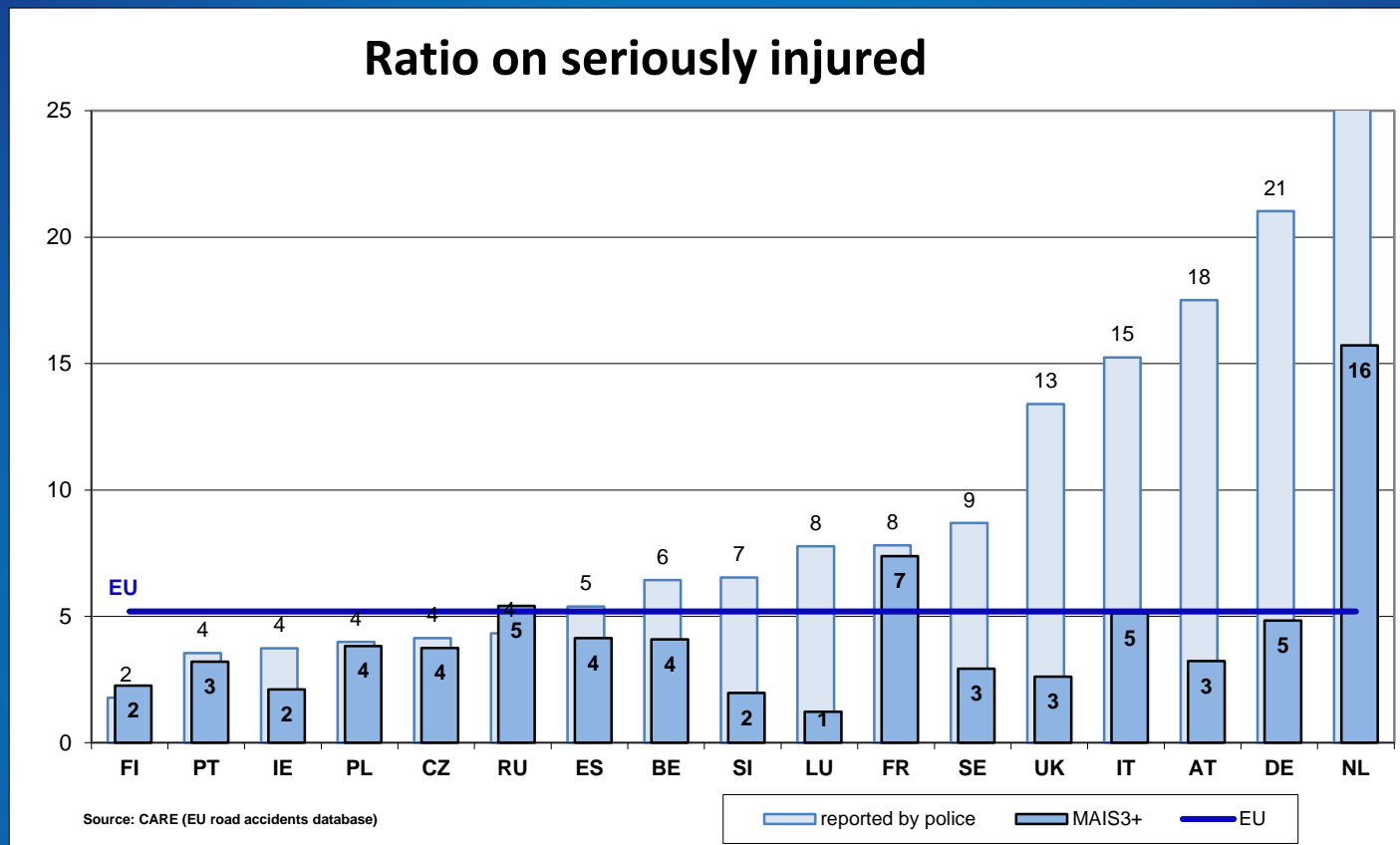


- **AIS codification**
  - Direct codification on hospital registry from experts using AIS dictionary
  - Conversion from ICD codes to AIS using mapping table

The decision remains to each country



# Seriously injured MAIS3+





[https://ec.europa.eu/transport/road\\_safety/](https://ec.europa.eu/transport/road_safety/)

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