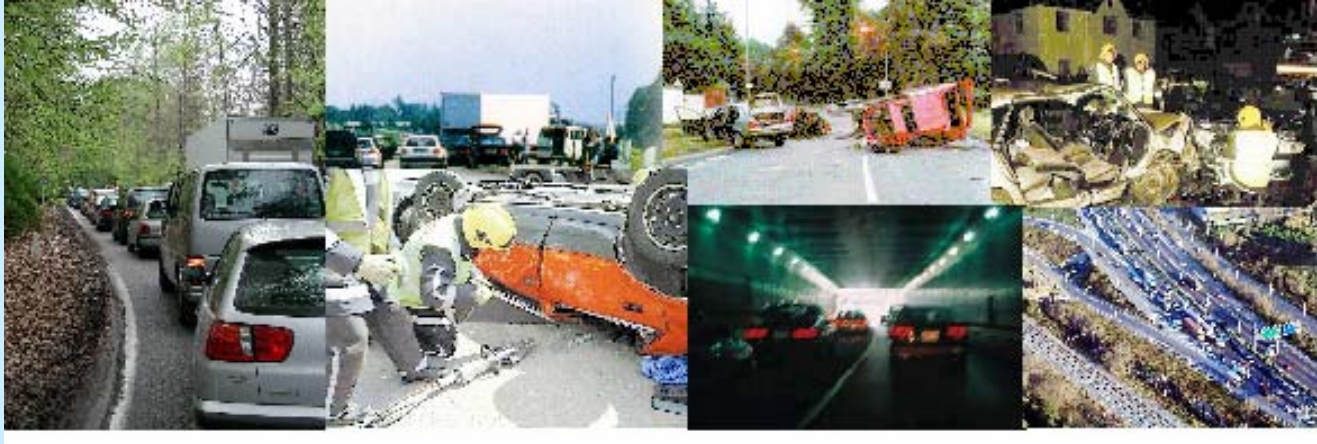




ACEM Conference

Brussels, 21 November 2006



Powered two-wheelers and Road Safety: taking stock - looking ahead

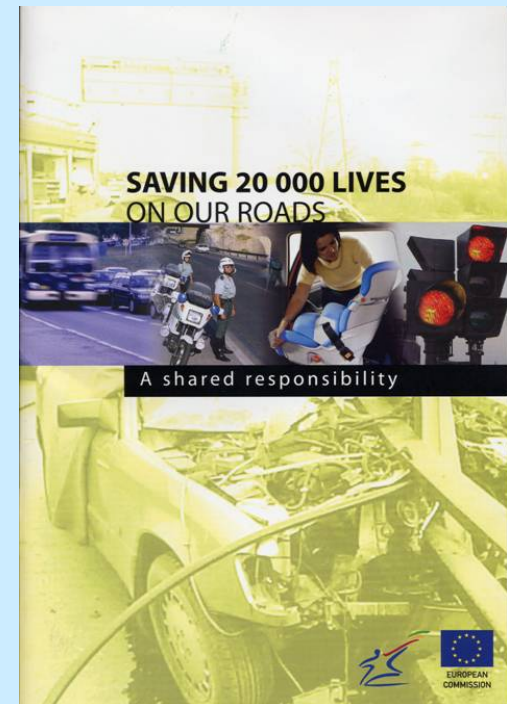
Dr. Stefan Tostmann

**Head of Unit
Road Safety**



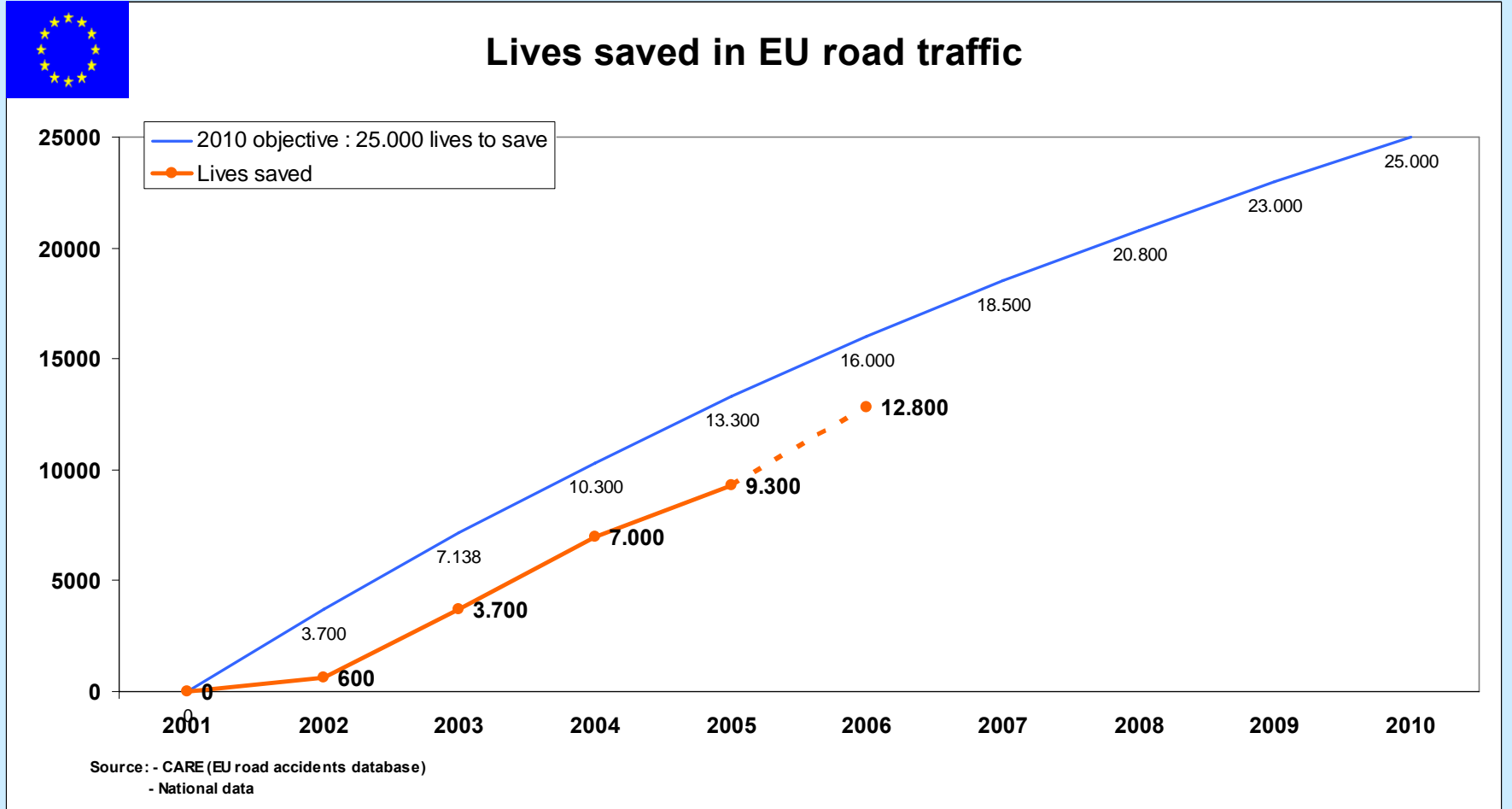
Road Transport Policy in the EU

- White Paper on transport policy (2001)
- Fight Congestion
- Increase Road Safety
 - 50% reduction of road fatalities by 2010
 - A shared responsibility





Lives saved - evolution 2001-2010





Road Safety

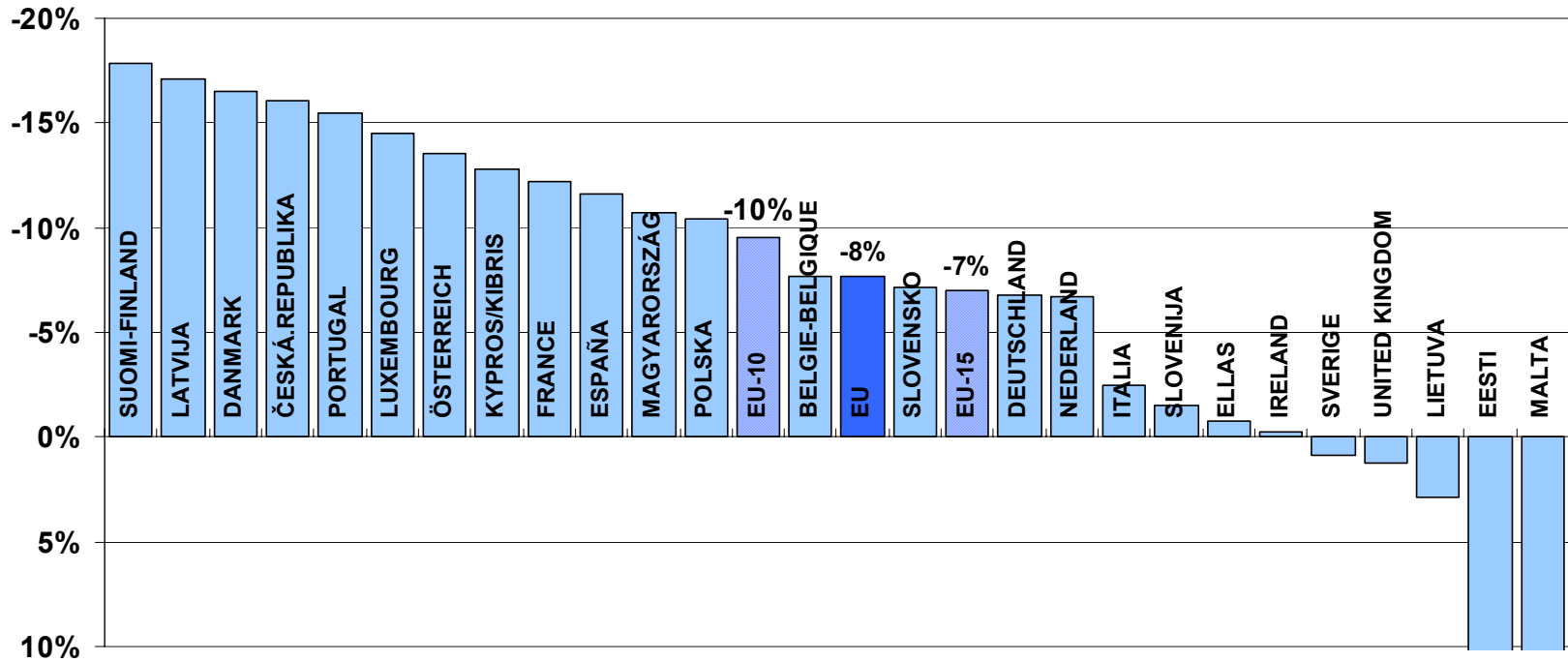
Mid term review

- Where are we with the target?
 - ◆ Actual figures: 50.000 fatalities in 2001, **40.900 fatalities in 2005.**
 - ◆ A global -17.5% over 4 years when -27% would have been needed to meet the 2010-target.
- Not so bad, but....
- The mid term review on road safety announced in the road safety action programme has been adopted and published on the 22nd of February 2006 by the Commission.



The “-50%” objective

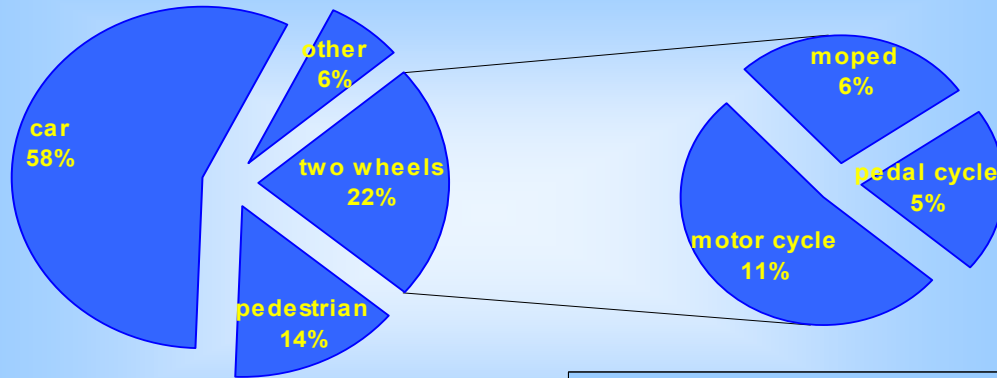
Reduction of casualties (in %)
Autumn 2005 - Autumn 2006
(preliminary figures)



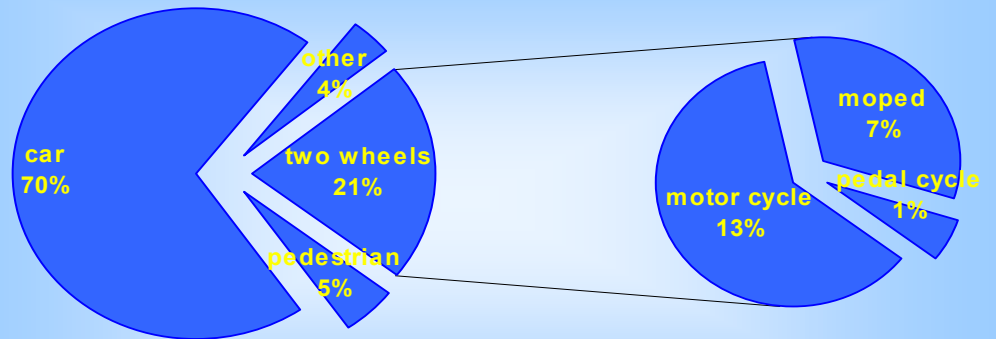


Road Fatalities

2003 - EU fatalities all ages



2003 - EU fatalities 18-25

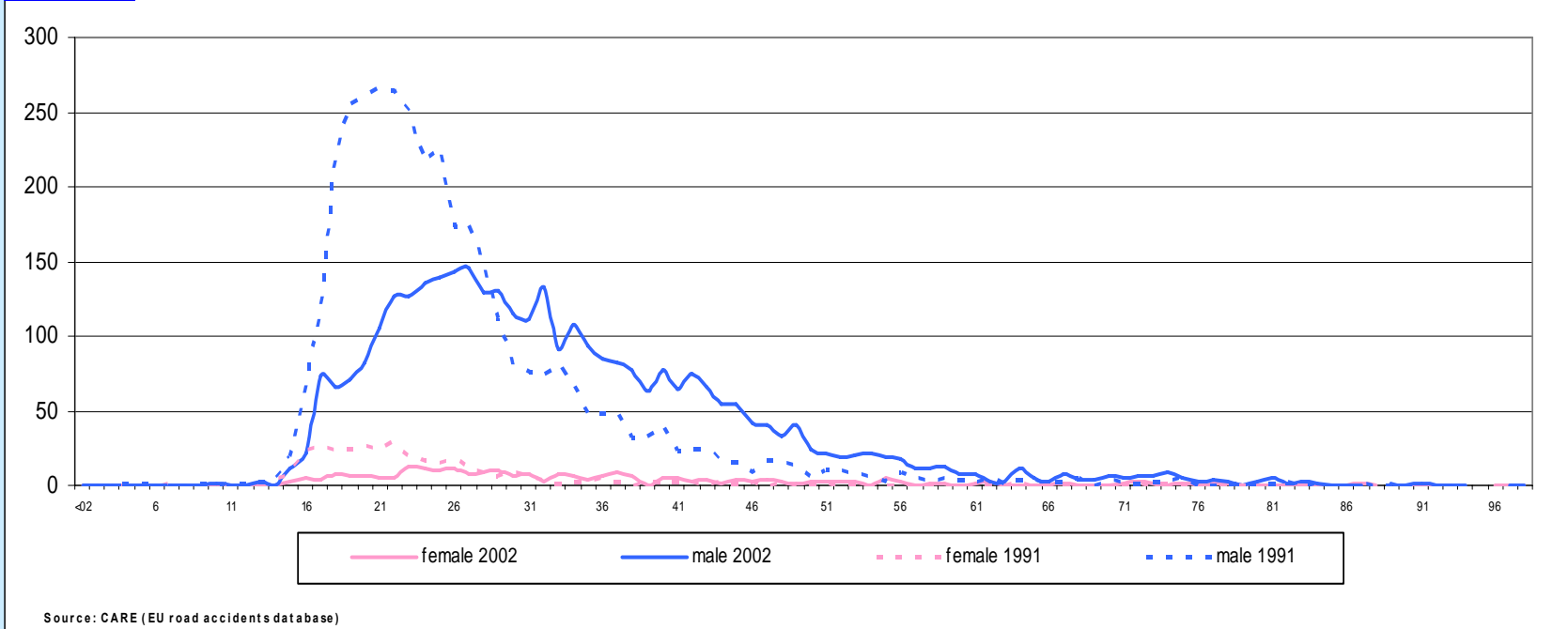




Motorcycle Fatalities



Motorcycle fatalities by age and gender
Evolution : 2002 - 1991

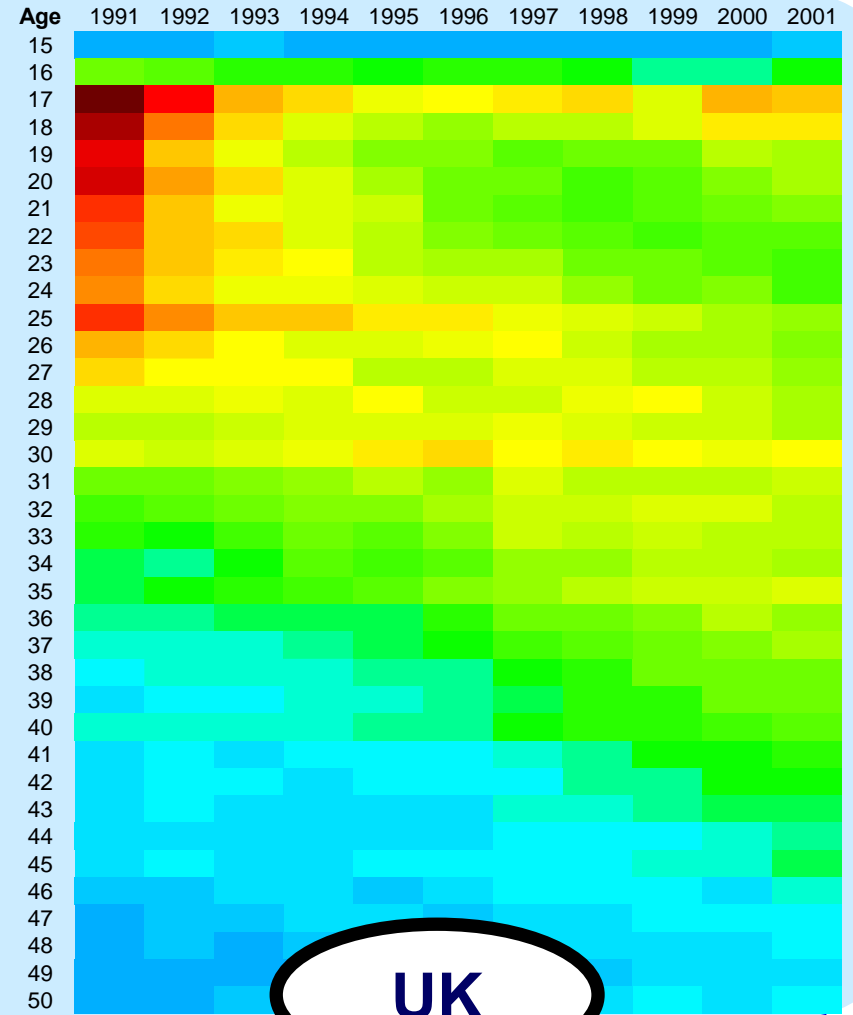
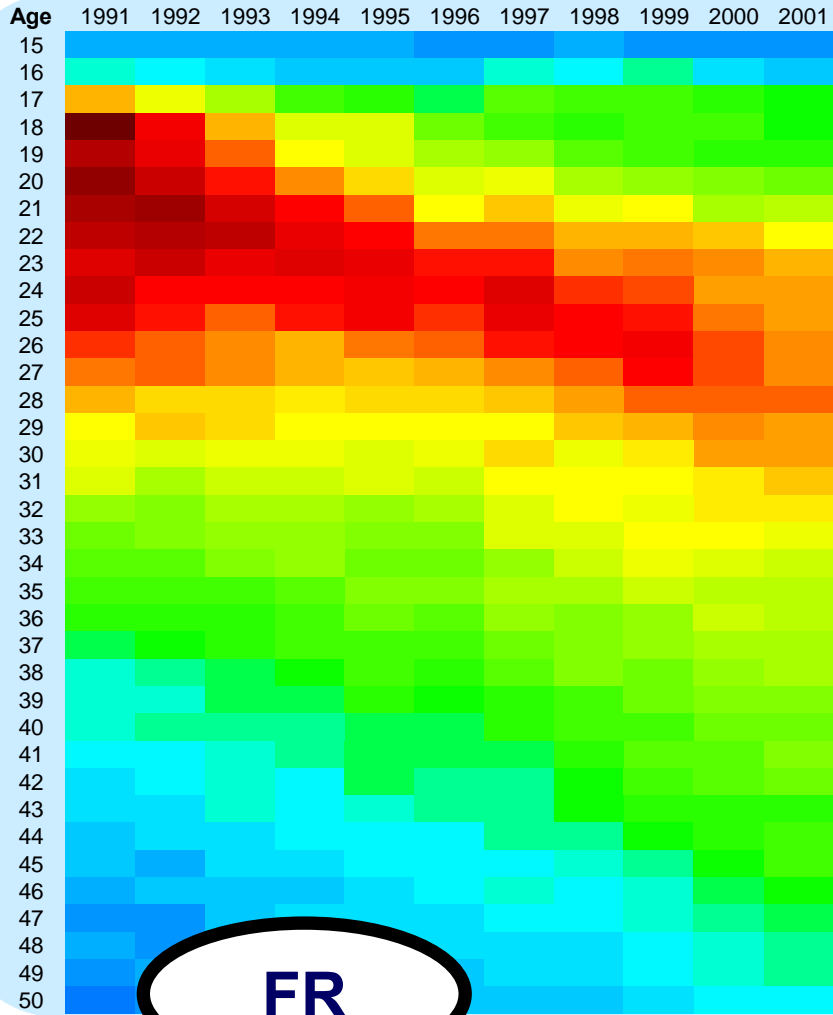


5. PTW riders between 41 and 55 years of age were found to be under-represented, suggesting that they may have a lower risk of being involved in an accident when compared to other rider age categories.

6. When compared with the exposure data, 18 to 25 year old riders were found to be overrepresented.

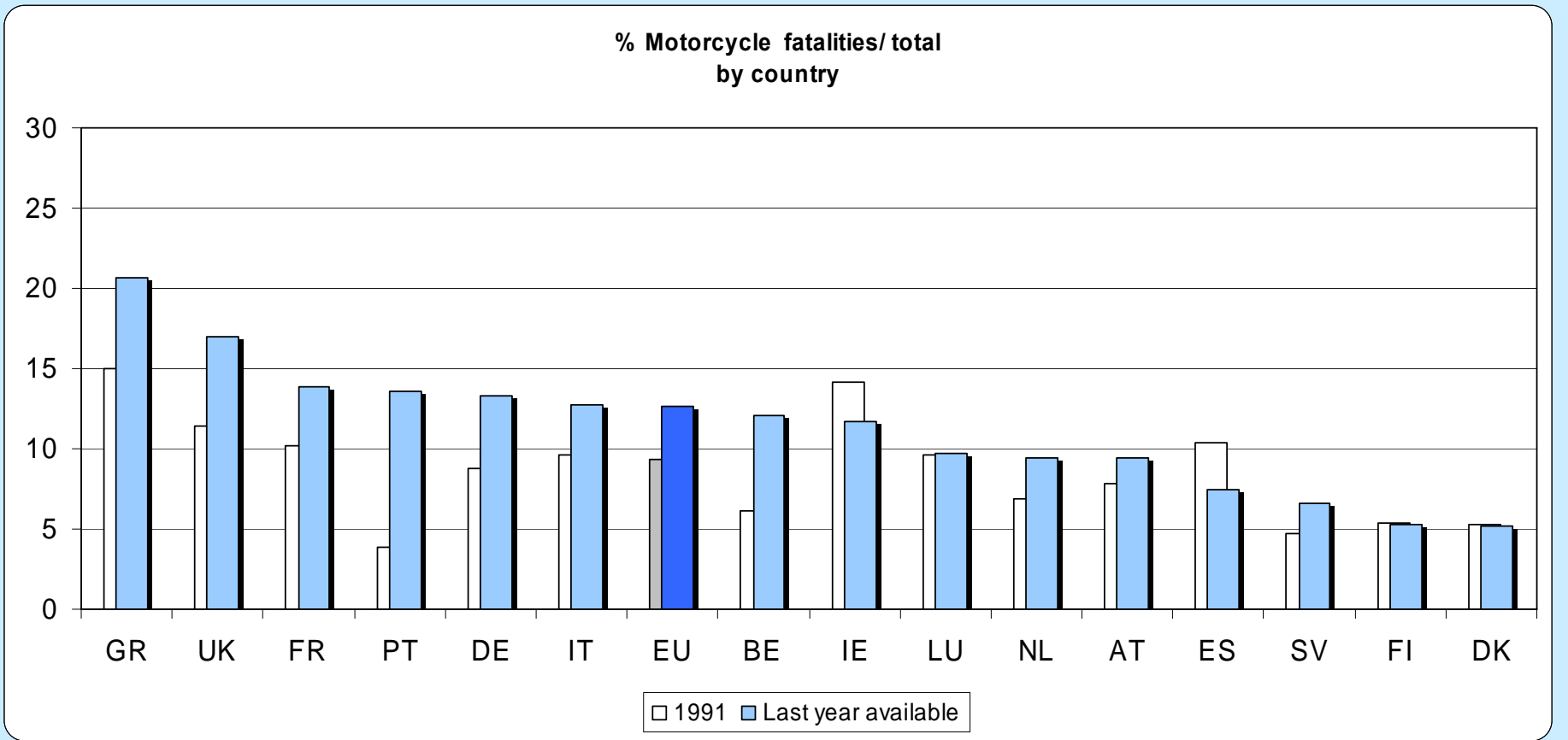


Drivers' age





Motorcycle Fatalities





Hypotheses

- Instead of **young people** more and more **middle aged and older people** buy motorcycles and even learn to drive.
- Whereas in some Member States motorcycles are also considered as a **regular means of transport** (e.g. Italy), in other Member States (e.g. Germany) motorcycling is mostly seen as a **leisure activity**.
- **Motorcycles** and **mopeds** are following different patterns



MAIDS conclusions (User Behaviour)

1. In 37% of cases, the primary accident contributing factor was a **human error** on the part of the **PTW rider**.
2. In 13% of all cases, there was a **decision failure** on the part of the **PTW rider**.
3. The number of cases involving **alcohol** use among the PTW riders was less than 5.
7. In 50% of cases, the primary accident contributing factor was a **human error** on the part of the **OV driver**.
8. OV drivers holding **PTW licences** were less likely to commit a **perception failure** than those without a PTW licence, i.e., they did not see the PTW or its rider.
10. Traffic **control violations** were frequently reported, in 8% of the cases for **PTW** riders and in 18% for **OV** drivers.
13. Among the primary contributing factors, over 70% of the **OV** driver errors were due to the failure to **perceive** the PTW.
14. In 60.0% of accidents, the collision partner was a **passenger car**.



MAIDS conclusions (vehicle technology)

15. **Tampering** in order to increase performance was observed by visual inspection in 17.8% of all **moped cases**. This value is lower than those reported in other studies. The exposure study only shows 12.3% of tampering.
16. Only modified conventional street motorcycles were found to be over-represented in the accident data. There was no evidence of an increased risk associated with riding any other PTW style.
17. There were PTW **technical problems** in less than 1% of the accidents. Most of these were related to the tyres, illustrating the need for regular PTW inspections by the owner. There were no cases found by the teams in which an accident was caused by PTW design or manufacture.
20. 73.1% of all PTW riders attempted some form of **collision avoidance** immediately prior to impact. Of these, 32% experienced some type of loss of control during the manoeuvre.



MAIDS conclusions (passive safety, clothes)

21. 90.4% of the PTW riders wore **helmets**. However, 9.1% of these helmets came off the wearer's head at some time during the accident, due to improper fastening or helmet damage during the accident. Overall, helmets were found to be an effective protective device to reduce the severity of head injuries.

22. 55.7% of PTW rider and passenger injuries were to the upper and lower extremities. The majority of these were minor injuries, e.g. abrasions, lacerations and contusions. **Appropriate clothing** was found to reduce, but not completely eliminate, many of these minor injuries.



MAIDS conclusions (infrastructure)

23. **Roadside barriers** presented an infrequent but substantial danger to PTW riders, causing serious lower extremity and spinal injuries as well as serious head injuries.

24. For PTW riders, a roadway **maintenance** defect caused the accident or was a contributing factor in 3.6% of all cases.



Solutions (...)

1. Progressive access
2. ABS, ESP, ...
3. Conspicuity (conventional or "advanced")
4. Safety Audit
5. OV driver training/campaigns
6. Passive safety devices (Airbag, ...)
7. Enforcement
8. Technical inspection (tampering)
9. Urban planning – and outside urban areas??
10. Modifying PTW-dynamics



Possible approaches

- Motorcycle Action Programmes – other countries
- Study on conspicuity – DG RTD
- Distinction between urban and non-urban motorcycling – urban planning
- Analyse impact of OV driver training/campaigns
- RS planning guidelines
- Passive safety devices pilot projects



Legislative initiatives

- **Blind spot mirrors**
- **Road infrastructure safety**
- **Driving licence**
- **Daytime-running lights**
first glimpse at closed consultation



The way ahead

- **Integrating motorcycle issues in all road safety initiatives**
- **A solid factual base – what are we talking about?**
- **An action plan: identifying the most pressing issues and means to resolve them**



Thank you for your attention!

http://ec.europa.eu/transport/roadsafety/index_en.htm