# 3rd Road Safety PIN Conference 2010 on the Horizon

Progress toward the EU Target and Other Rankings





## **EU** ambition

**EU target** to cut by 50% yearly road deaths between 2001 and 2010

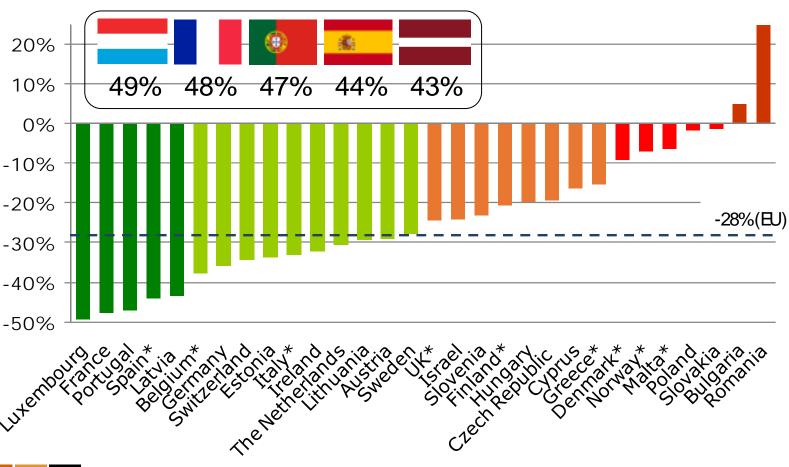
Countries have adopted similar national targets





## **Best progress 2001 - 2008**

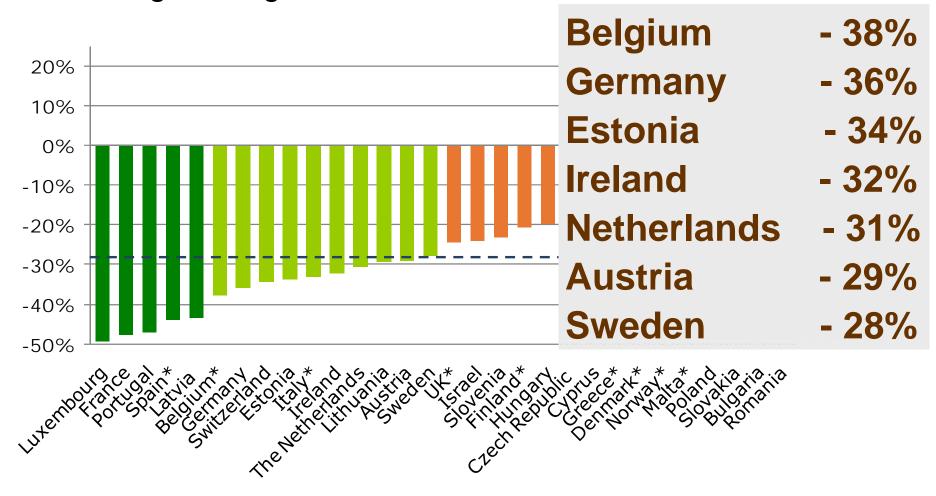
Percentage change in road deaths between 2001 and 2008





## Countries that are progressing

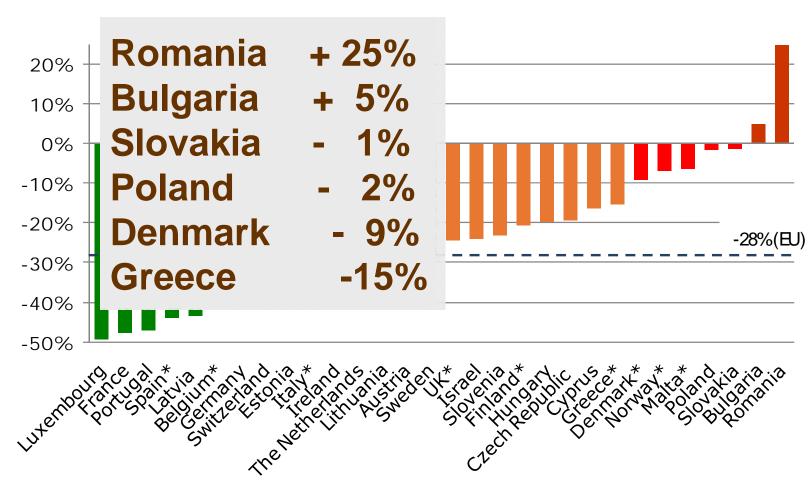
Percentage change in road deaths between 2001 and 2008





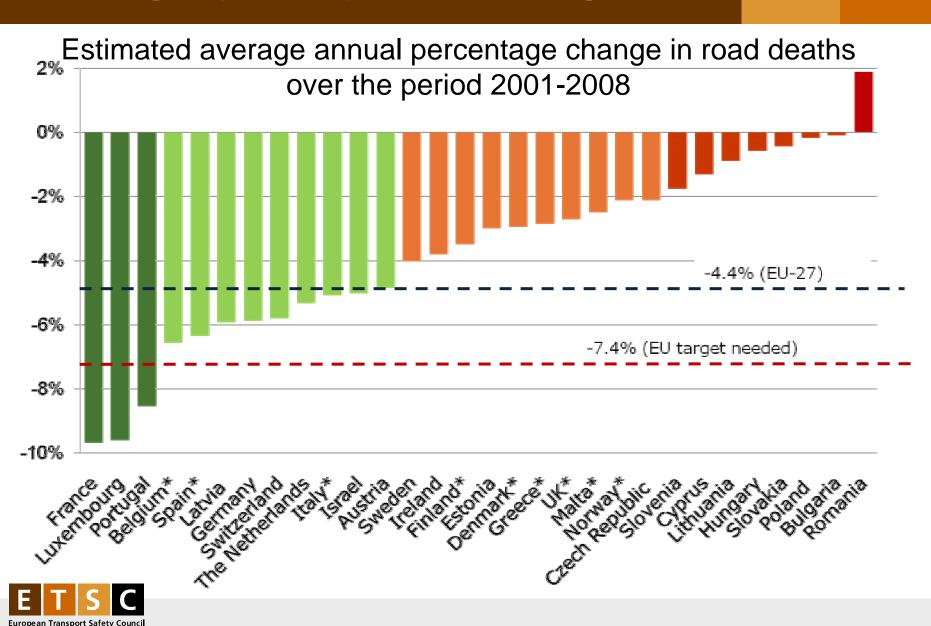
## Countries lagging behind

Percentage change in road deaths between 2001 and 2008

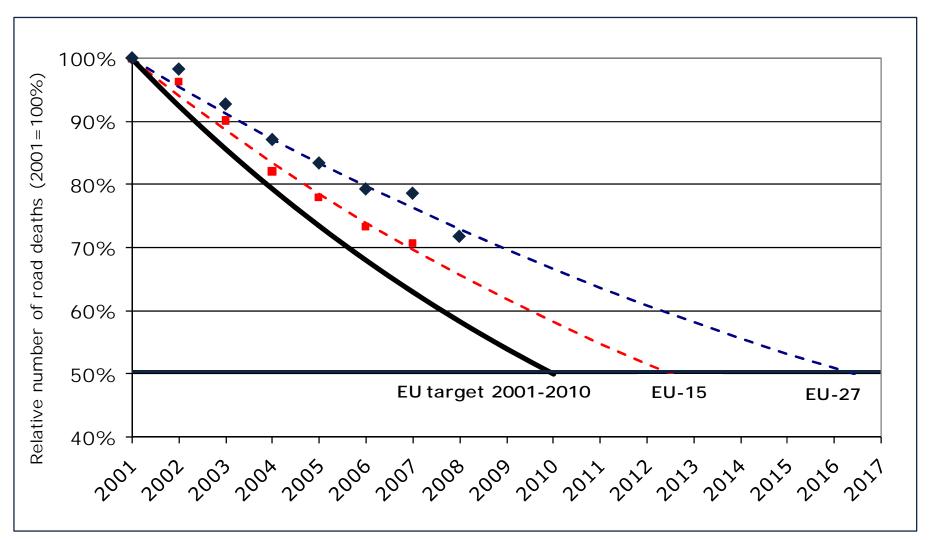




## Average yearly % change

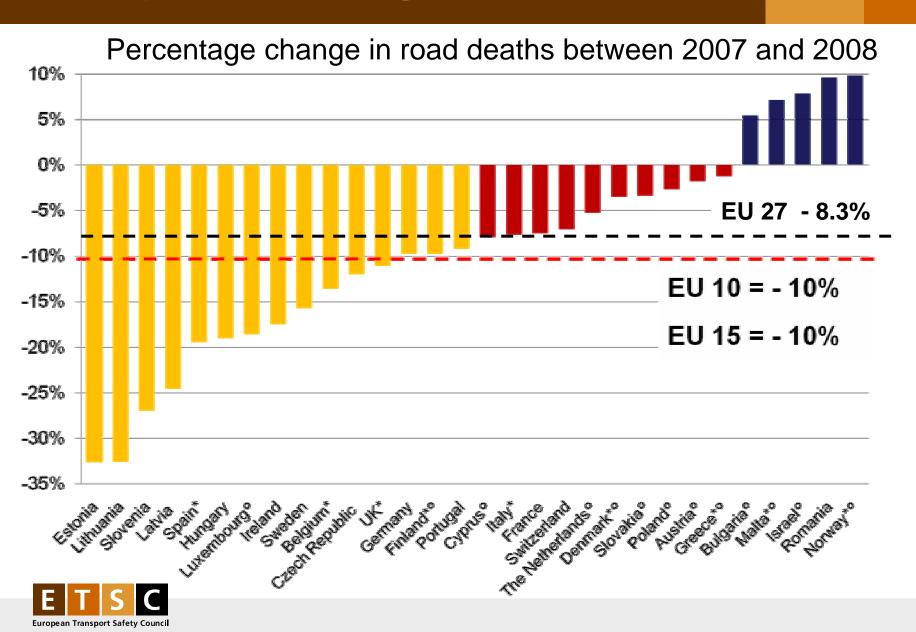


#### The EU needs further efforts



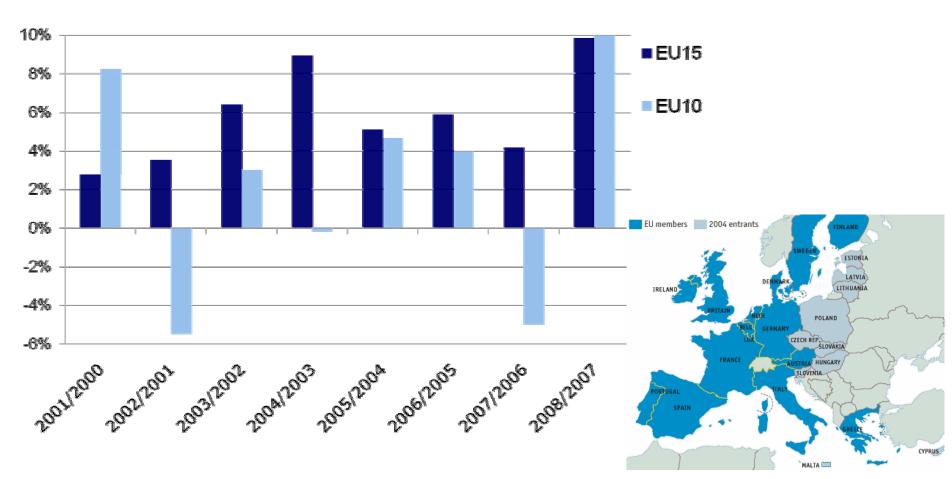


## Last year change



#### EU 10 and EU 15

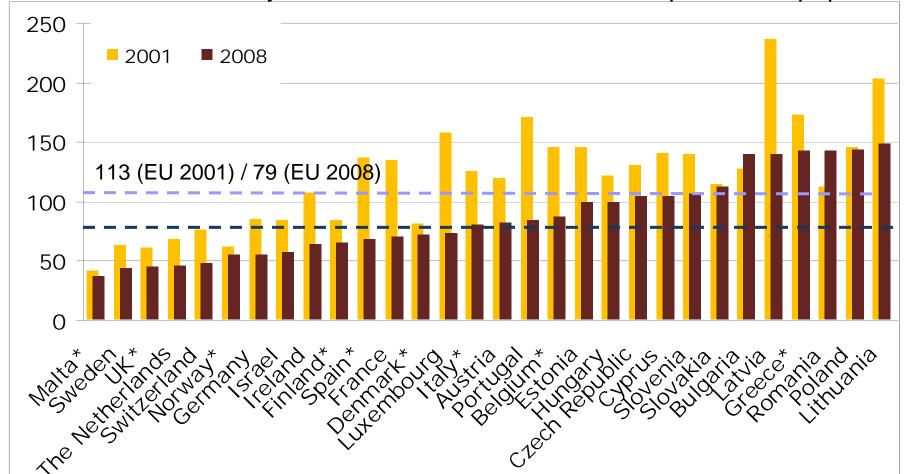
Year-to-year reduction in road deaths in EU 15 and EU 10





## Road deaths per population 2008

Still fourfold difference between Malta and Lithuania
But no more country with more than 150 road deaths per million population

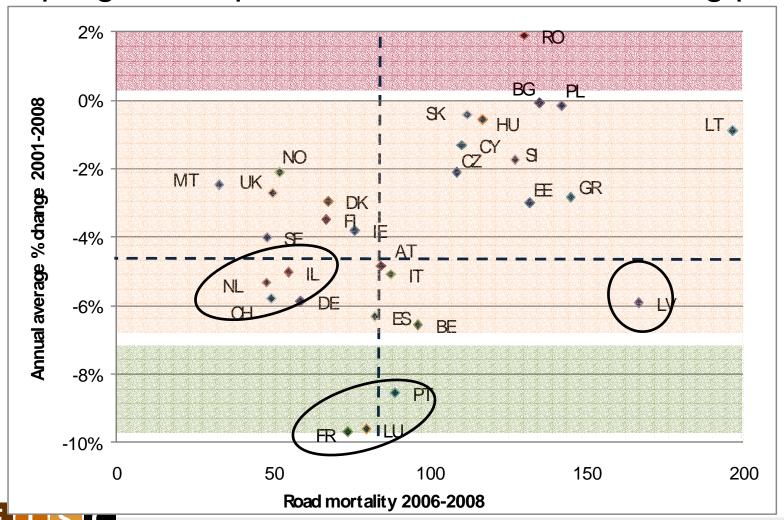




## Mortality versus reduction

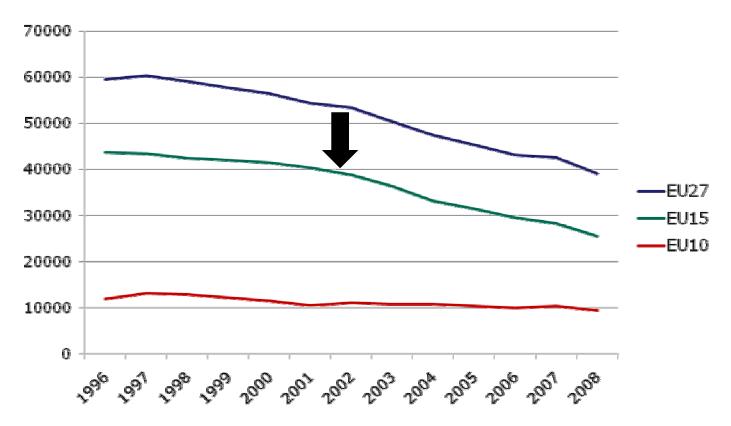
**European Transport Safety Council** 

Fast progress is possible whenever its starting point is



## The impact of the EU Target

Setting a target in 2002 has triggered further improvements in EU Additional impetus to Central and Eastern EU countries needed





## Vehicle safety

- A key factor in road safety

**Anders Lie Swedish National Road Administration** 



## **PIN Country ranking**

- There is no overall indicator of what is a safe car
- All cars sold in the EU have to comply with common min. standards (EU type approval regulation)
- Euro NCAP provides an objective assessment of the protection provided by a car in case of a crash and gives stars to cars going beyond those min. standards



## **PIN Country ranking (II)**

#### Two indicators with equal importance:

- Occupant protection:
  - proportion of cars awarded 5, 4, 3 and 2 stars for occupant protection among new cars sold (Fig. 1)
- Pedestrian protection:
  - proportion of cars awarded 3, 2 and 2 stars for pedestrian protection among new cars sold (Fig. 2)

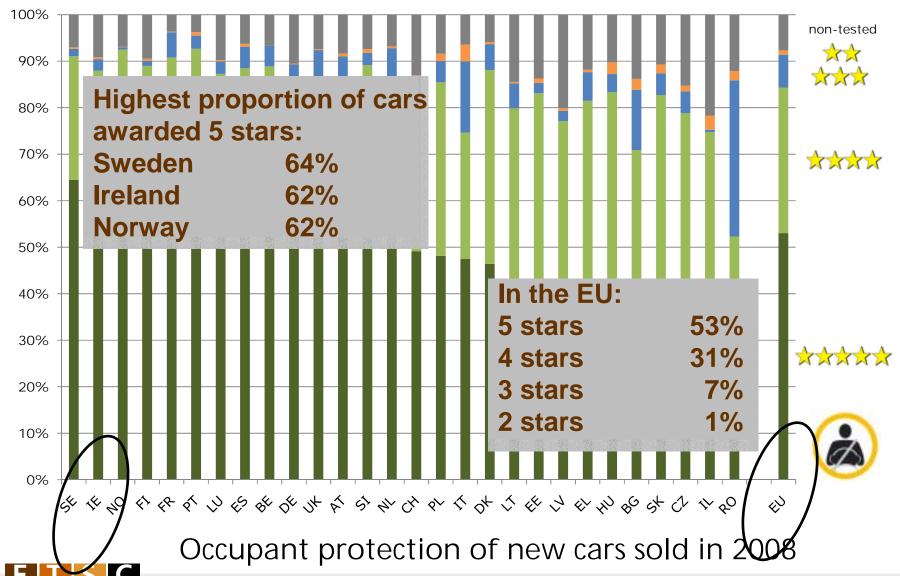
#### Two additional indicators

- Child occupant protection
- Penetration of Seat Belt Reminders in new cars



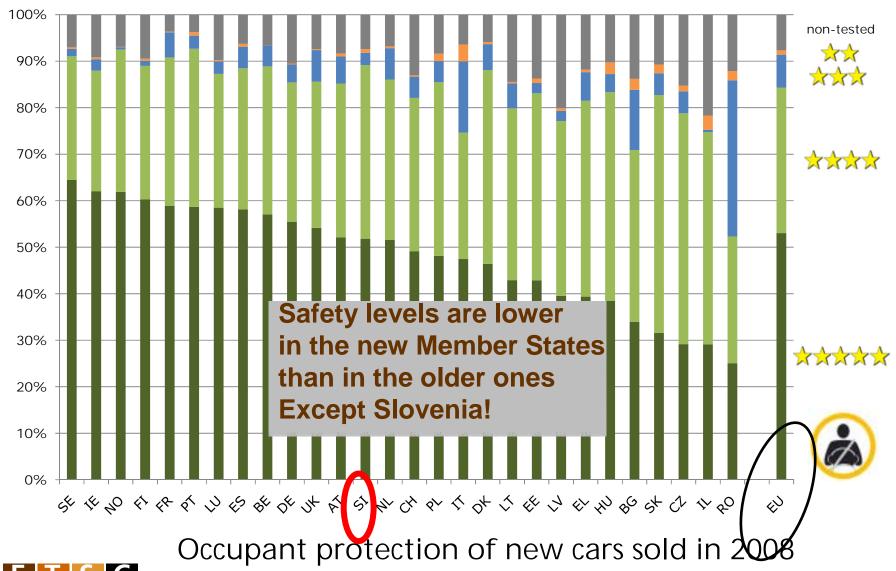
## Occupant protection





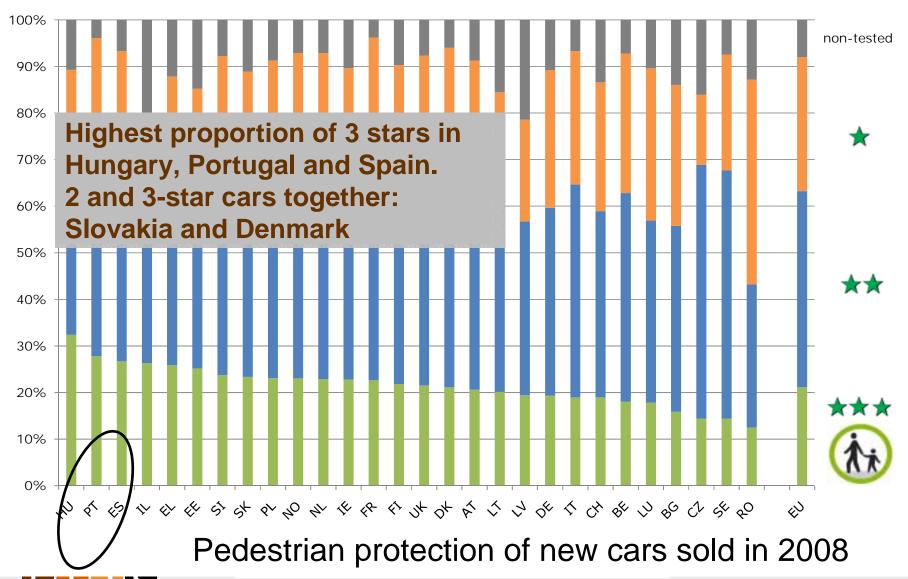
## Occupant protection





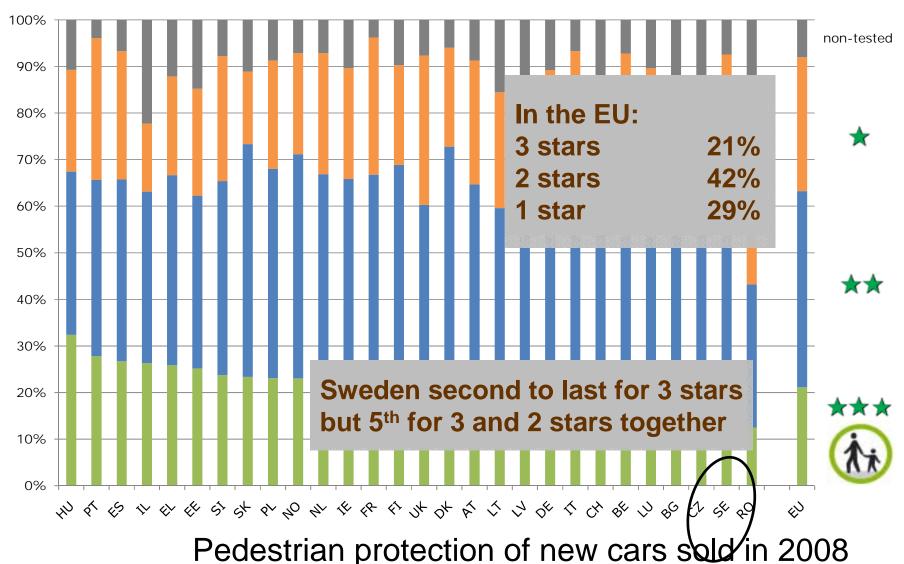
### Pedestrian protection





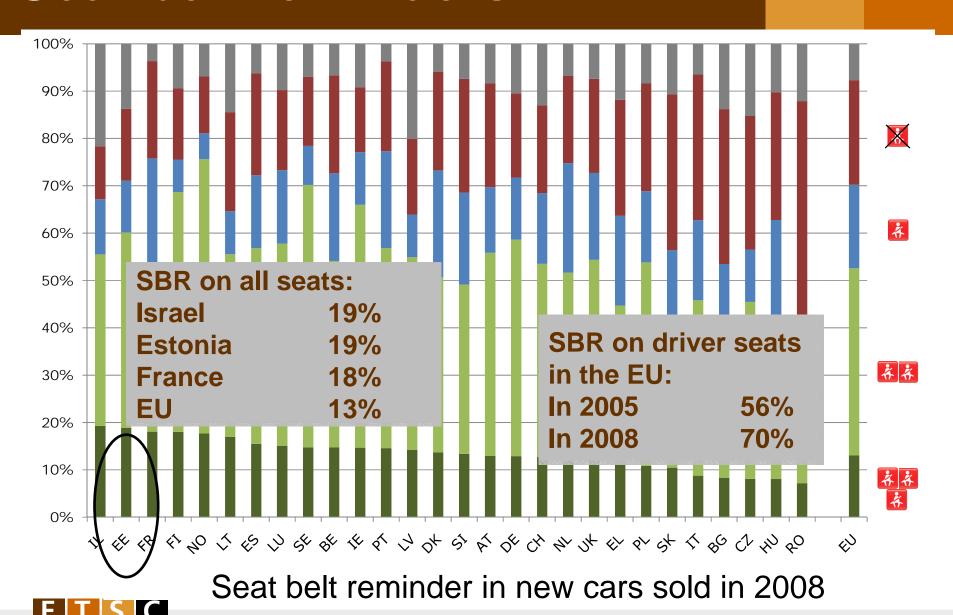
### Pedestrian protection



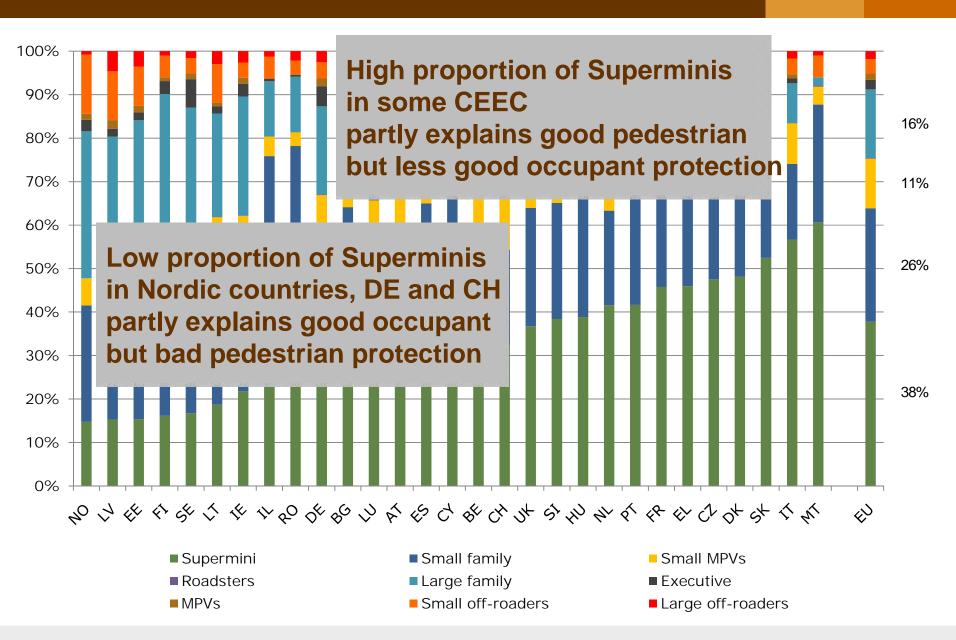




#### Seat belt reminders



#### **Market share**



#### Conclusions

- Vehicle safety has improved considerably over the past decade
  - because of increased EU common min. standards and manufacturers' efforts to meet consumer demands for safer cars
- BUT Slower progress on pedestrian protection
- the new 2009 Euro NCAP protocol will challenge car manufacturers to make all-round safer cars
- □ and will make it easier for consumers to choose the 'stand-out' safest vehicle



## What can a country do

#### To promote safer cars:

- Include vehicle safety in the traffic safety work
- Support Euro NCAP and actively use the results
- Support every organisation that want to use vehicles safety
- Look at management systems (ISO 39000)
- Use travel policies
- Be the market (All governmental bodies must only buy...)
- Get occupational health and safety on-board
- Follow up new technologies (to give advice)



#### **SRA** short term rental

Cars rented for <6 months must meet the following requirements:

- Be awarded 5 stars for occupant protection by Euro NCAP
- Be equipped with an antiskid system (Electronic Stability Control, ESC)
- Be equipped with a seatbelt reminder on the driver seat that meets Euro NCAP requirements
- Protection against whiplash injury shall be assessed as at least a "yellow" on the SRA system or as "acceptable" in a Thatcham dynamic test.



## SRA long term rental

- Cars rented for > 6 months must also meet the following requirements:
- Be awarded at least 2 stars for pedestrian protection by Euro NCAP
- Be equipped with an alcohol ignition interlock
- Be equipped with an informative or supportive Intelligent Speed Assistance system (telling the local speed limit and/or issuing a warning if this is exceeded)



## Other good practices

- From Denmark:
- Denmark has one of the highest levels of car registration tax in Europe. Safety equipments such as airbags and ESC are exempted
- □ As a result: Denmark is the country in EU with the highest proportion of cars fitted with ESC as a standard.



## What can companies do



Management systems help organisations deliver by systematic work and management

- ISO 9001 (Quality)
- ISO 14001 (Environment)

A management system for road traffic safety can help organisations to be better

 Proposed ISO 39001 (Road-traffic Safety management systems)

Everyone company has a responsibility to assure safety



## So many technologies available

BLIS

Driver Alert Alcoguard

**IDIS** 







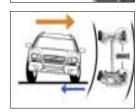
**DSTC** 

**RSC** 

**FCW** 







**Emergency Lane Assist** 

City Safety

Collision Mitigation







Safety Cage

Inflatable Curtain

Whiplash Prevention System







**Dynamic** 

**Avoidance/Mitigation** 



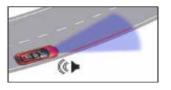




### We need to be problem oriented







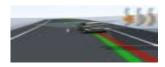
The possible

**Problem** 













The important

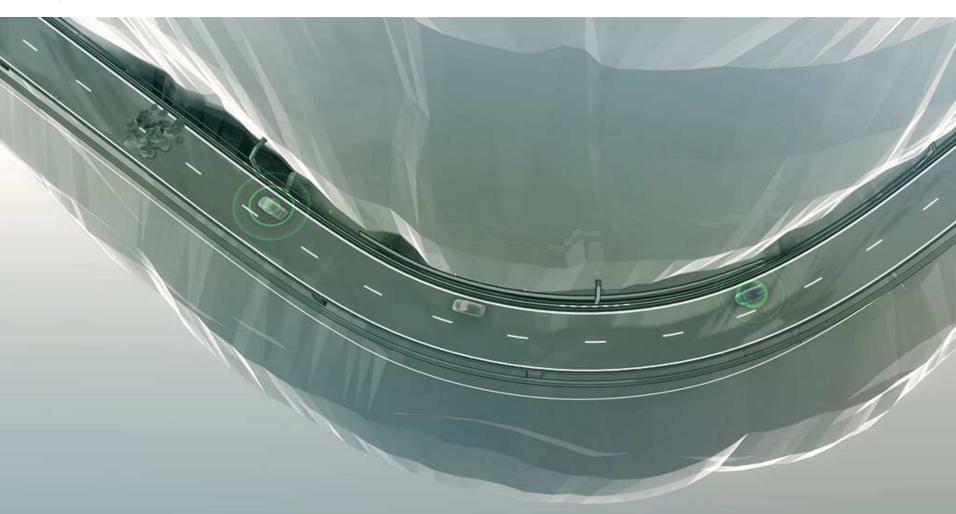


Technology



## Volvo 2020 target

Our vision is to design cars that should not crash. By 2020 no one should be killed or injured in a Volvo



## ETSC Recommandations I

#### To national authorities and the EU:

- Set strict safety requirements (5- sar Euro NCAP)
   for the purchase of new cars under scrappage schemes.
- Provide tax incentives for safe cars (5 sar Euro NCAP)
- Adopt the ITS Directive promoting technologies and systems that bring about the greatest life saving potential.
- Ensure that robust in vehicle safety technologies are mandated in new legislation (as for ESC). This would prevent that such safety technologies are sold as standard in one EU country and not as an option in another.



# Reducing Child Deaths on European Roads

Jacqueline Lacroix German Road Safety Council (DVR)



## Children (0-14 years old)

- Children represent 1/6 (17%) of EU population and 4% of road deaths in the EU
- 16 child deaths per population (children population in million)
  - versus 95 deaths per population for the rest of the population (adult population in million)
  - → children are 6 times safer...
- Still 18,500 children were killed on EU roads over the past decade
- 1,200 in 2007 alone
  - Every tenth child death results from a road collision



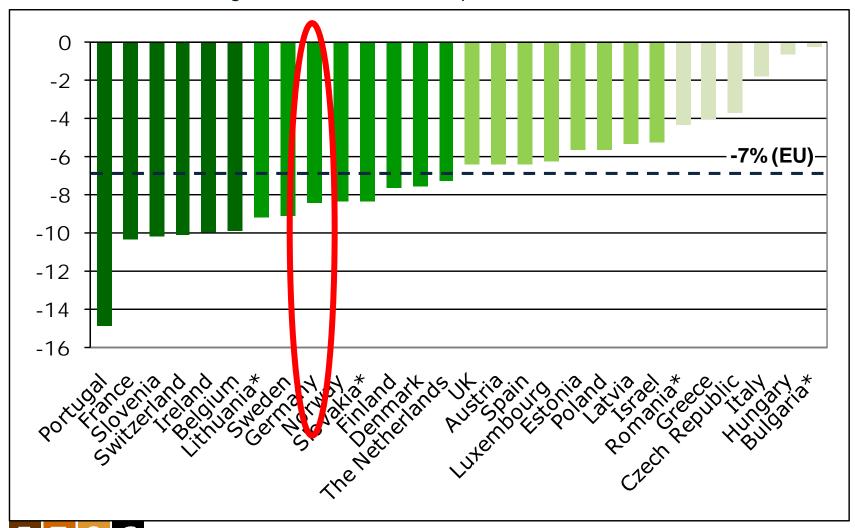
## Why children?

- Children do not choose where they live
- Children have little control over the environments and products they are exposed to
- Children have limited access to information and traffic is a complex system for children
- → It is therefore imperative for the <u>society</u> to ensure the safety of children as a fundamental human right



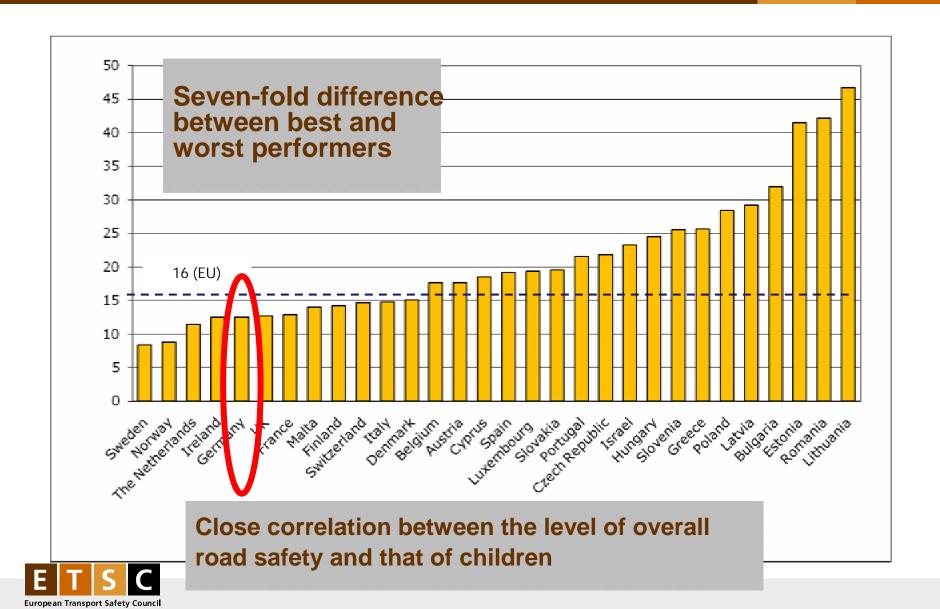
## Reduction in child mortality

Annual average % reduction over the past decade





## A great disparity in mortality



### 600 child deaths avoidable in the EU27

- Half of child deaths in the EU 27 could be avoided each year if child road mortality was the same than in Sweden
- i.e. in 2007 alone, around 600 children would have been killed instead of 1219 in the EU-27.
- In Sweden in 2008: only 19 child deaths, only 1 killed as pedestrian, none as cyclist
- →Vision 0 for children or for subgroups of children is realistic for a great number of countries.



#### Sweden's success story

- Vision 0
- Political will
- Lead agency
- Urban planning (traffic calming, separated pedestrian and cycle routes to school,...)
- Rear facing child seat (<4 years old)</li>
- Child care services
   Often child care services are provided where parents work: thus reducing the risk of accidents by reducing travel demand



#### Portugal: best reduction

#### Work of NGOs: ex. of APSI



- Target setting in the National Plan (2003 2010) Associação para a Promoção da Segurança Infantil
   Objectives: 70% use of CRS, 50% proper use
- Lower VAT on CRS
- Work with CRS retailers to increase the offer of rear facing seats
- Information campaigns on child safety restraints (CSR)
- Transport of Children in Organized Groups: law in 2006
- vehicles with seatbelts and CRS
- professional training for drivers
- criteria for the choice of safe vehicle stops
- presence of an accompanying adult





### Other good practices

#### EU

- Legislation on restraint systems
- Armadillo campaign

#### UK

- Separate child reduction target
- Community work in deprived areas
- Lower VAT on child restraint equipment

#### **Netherlands**

Sustainable safety: lower speeds





# Other good practices

#### **Germany**

 Educational programme for parents: Child & Safety since 30 years:

Dautschen Varhahrssichenkeitsroten u.V.

intel sidner Mittalliscler

- Safe way to school
- 30 km/h zones and streets
- Vehicle safety



# En route to safer mobility in EU capital cities

Michael Brosnan
Irish Road Safety Authority





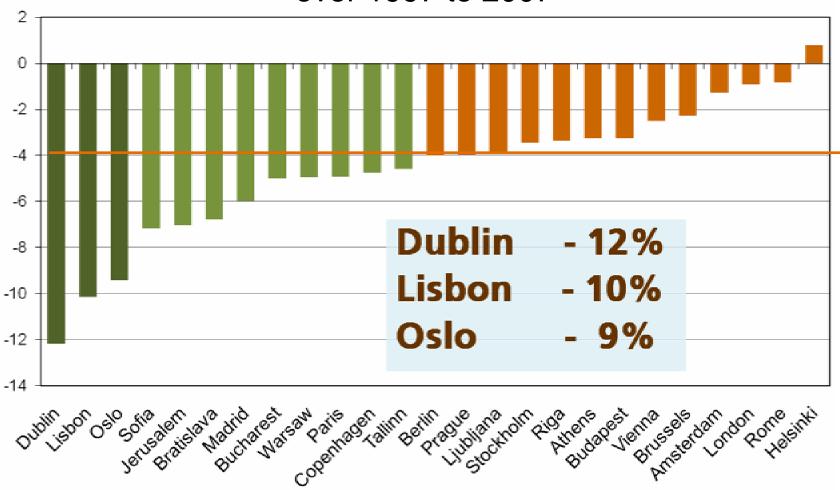
# Road Safety in cities

- Over 60% of the EU population lives in urban areas
- 40 million people live in the 27 capital cities
   (= 8% of the EU population)
- Capitals: showcases for other cities
- European Road Safety Day in Paris 13 Oct. 2008
   "Road Safety in our cities"
- But difficult: no generally accepted methodology to benchmark differences in safety levels between cities
- So, as a starting point we looked at trends: percentage changes in death rates over time



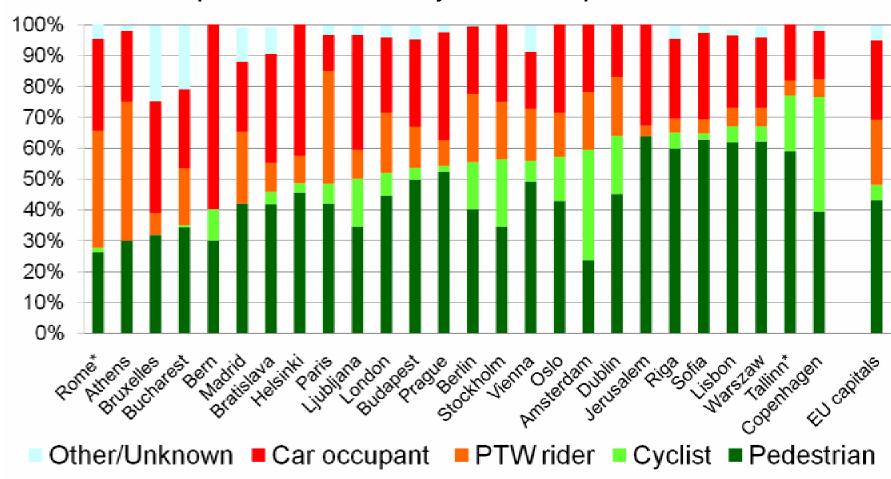
### **Fastest progressing cities**

Average annual % change in deaths per inhabitants over 1997 to 2007



# Strong actions needed

... to protect vulnerable road users: one victim out of 2 is either a pedestrian or a cyclist in capitals



#### Some PIN recommendations

## **Adopt a Road Safety Strategy**

- Adopt a Vision Zero for the city
- Consider all road users, esp. VRUs
- Work in partnership
- Relate road safety objectives to other policy objectives for the city
- Work with the police to ensure proper enforcement



# PIN recommendations (II)

- Improve the quality of public transport
- Develop safer infrastructure, especially for pedestrians
- Promote 30 km/h zones in residential area



Secure political backing and funding for road safety



# **Example of Dublin**

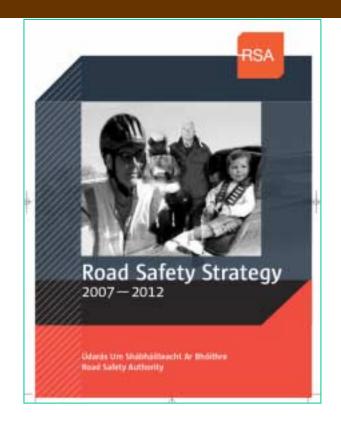
# Local Authorities can play a strategic role in crash reduction

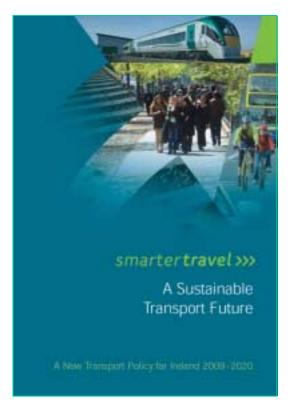
Dublin City Council (DCC) Strategies include

- Developing a casualty reduction programme
- Providing a modal shift from car to public transport, walking and cycling
- Developing and optimising the city's road network
- Improving the city's environment



### **Dublin Road Safety Plans**









# **Dublin City Casualty Rates**

#### On average over 1999-2003

- 20 fatal accident each year
- 1,480 injuries each year
- Community costs: approx. €320m

# Target 2005-2007: 25% casualty reduction over 3 years

 In 2006, Community costs cut already to approx. €100m



## Improve pedestrian safety

Speed management

European Transport Safety Council



Countdown timers



1997: 30 deaths, 615 injuries

2006: 7 deaths, 227 injuries

## Pedestrian safety (cont'd)

- Safe Crossings
- Child safety
- Managing Parking



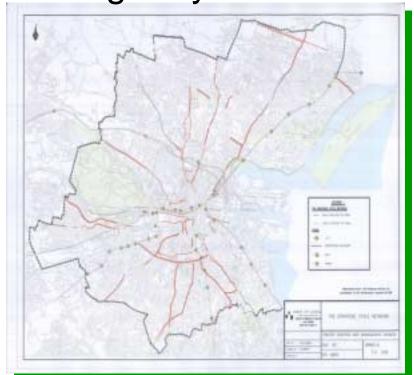


## Cycling safety

### Cycle paths



Implementation of over 160km of a Strategic Cycle Network



1997: 6 cyclist deaths, 284 injuries

2006:3 cyclist deaths, 86 injuries

# Better manage public space

- Quality Bus Corridors
   Provide road space for public transport
- HGV Management Programme:
   City wide ban of HGV



European Transport Safety Council



### **Enforcement**

- Cooperation with the Gardaí (police) on Road Safety issues in the city:
  - regular meetings between DCC and the police Collision Prevention dept.
  - joint approach in delivering educational programme in schools.



# **Next priorities**

- Implement 2009 Works Plan:
  - Expenditure of €11m proposed
  - 50% Co-funding 50% Parking Meter Fund
- Prepare next Strategy 2009-2012
  - Further combat crashes involving VRUs
  - Contribute to the National target(s)
- Continuous evaluation of road safety Strategy

## One death is one too many



# 3rd Road Safety PIN Conference 2010 on the Horizon

**Progress toward the EU Target and Other Rankings** 



