

**Next Phase of Developments for
Vulnerable Road User Safety: What's
New in Technology, testing and
transport-related research?**

**European Road Safety Day
6th of May 2013**

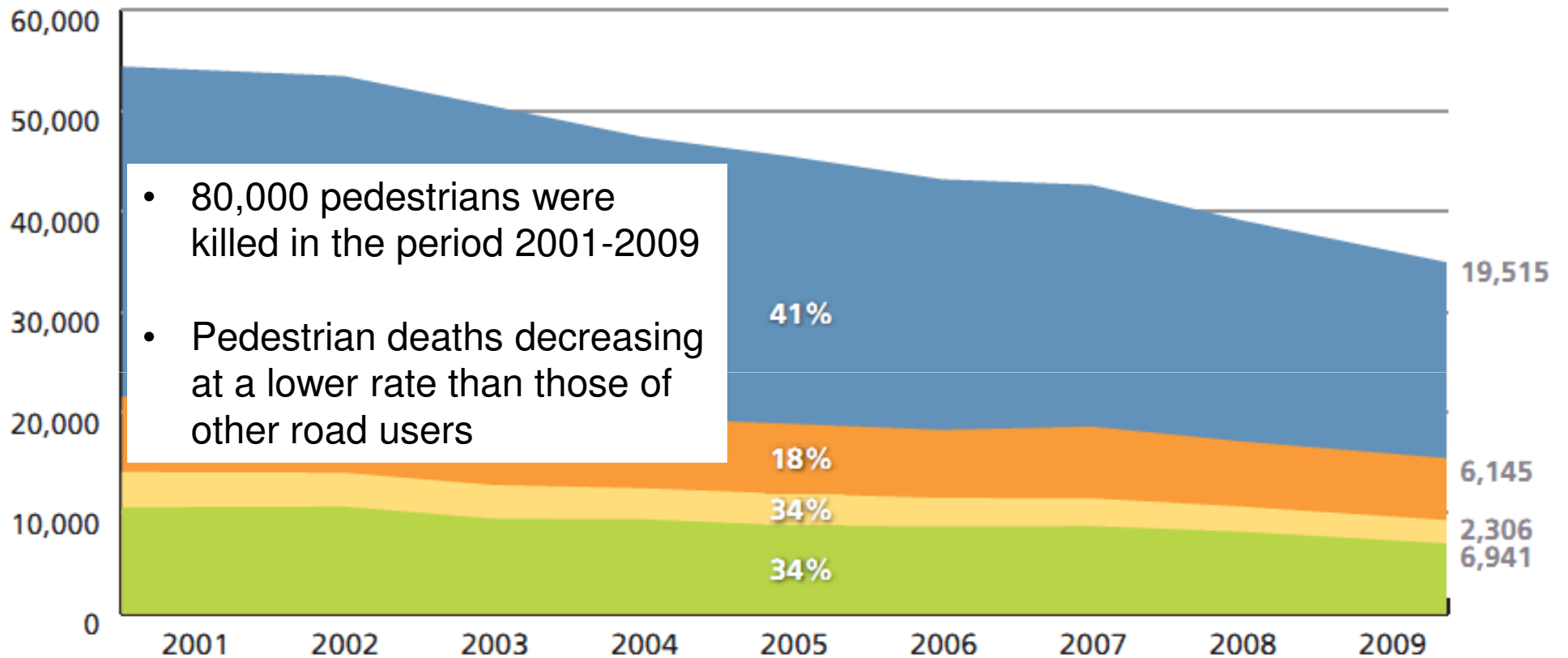


Antonio Avenoso, ETSC

Background

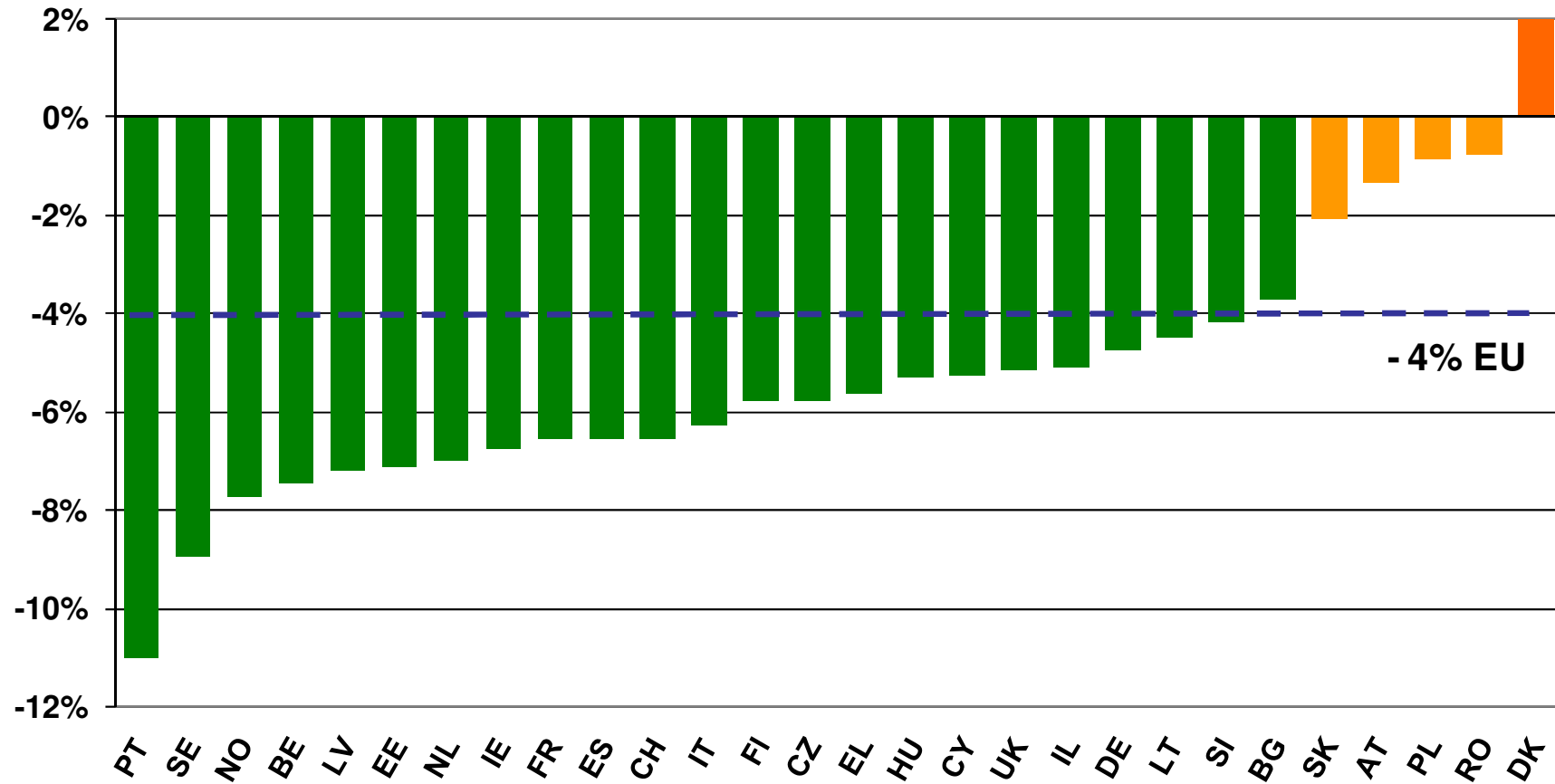
- Deaths among unprotected road users represent 44% of all road deaths across the EU
 - Pedestrians killed represent 20%, cyclists 6% and PTW users 17% of all deaths
 - Important differences exist between countries
- More difficult to give precise figures on injuries
 - Lower levels of reporting for pedestrians and cyclists
 - In collisions with no motor vehicle involved, or between one motor vehicle and a pedestrian or cyclist with no deaths on the spot, the victims, the driver or eyewitnesses will call the emergency services but not necessarily the police.

Reduction in road deaths since 2001



■ Other road users
 ■ PTW riders
 ■ Cyclists
 ■ Pedestrians

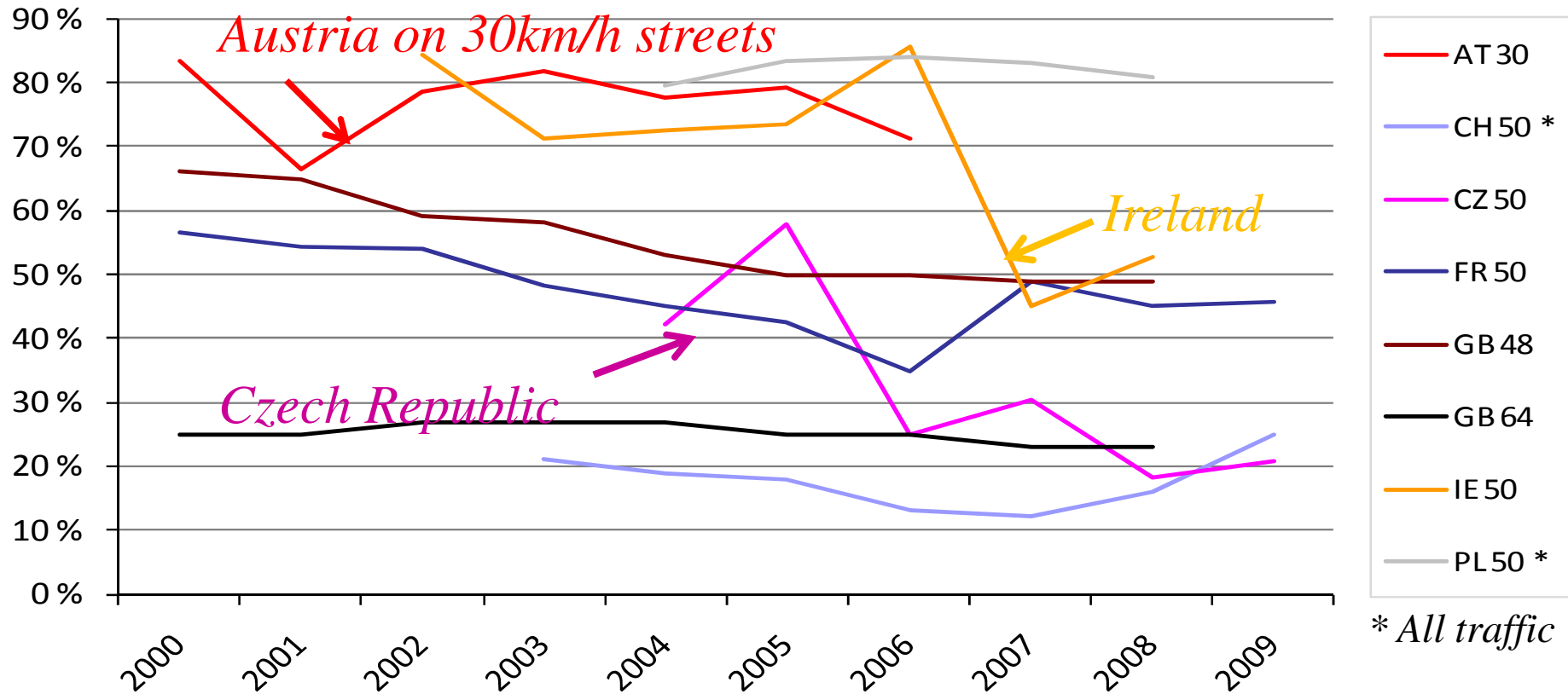
Progress in reducing pedestrian deaths



The improvements in pedestrian safety are to a larger extent a function of the overall improvements in road safety

Key for VRUs: Speed in Urban Areas

% of cars and vans exceeding speed limits on urban roads



Progress in reducing pedestrian deaths has been helped by a reduction in mean speed on urban roads

Priority measures for VRUs

☠ *Inappropriate or excessive speed*

More than **2,200** road deaths could be prevented each year if average speeds dropped by 'only' **1km/h** on all roads across the EU.



☠ *Driving under the influence of alcohol*

At least **7,500** deaths could be prevented each year if accident-involved drivers reported to be driving over the limit had been sober.

☠ *Non-observance of VRU, late and insufficient braking by Vehicle Driver.*

“Most VRU are likely to profit from the indirect benefits that some ITS applications developed for passenger cars will bring to their safety.”

Study on ITS - Safety and comfort of the Vulnerable Road User

Commissioned by the EC

Intelligent Speed Assistance (ISA)

Short Term:

- Development of harmonised standards for (ISA).
- Under the ITS Directive:
 - launch best practice guidelines on digital maps
 - or include this under specifications for priority actions (a) and (b).

Medium Term:

- Encourage routine roll out of ISA amongst particular user groups.

Long Term (2020):

- Adopt European legislation for mandatory fitting of EU cars with ISA systems in the type approval process

Alcohol Interlocks

- Alcohol interlocks require the driver to take a breath test before starting the car. If the driver fails the test, the device locks the ignition of the car.
- ETSC recommends a step-wise approach:

Short Term:

- Introduce uniform standards for alcohol interlocks in Europe.
- Ensure vehicles can be retrofitted with alcohol interlocks
- Provide Member States with guidelines to introduce the technology in rehabilitation programmes and fleets.
- Voluntary fitment for fleet (buses, taxis, HVs)

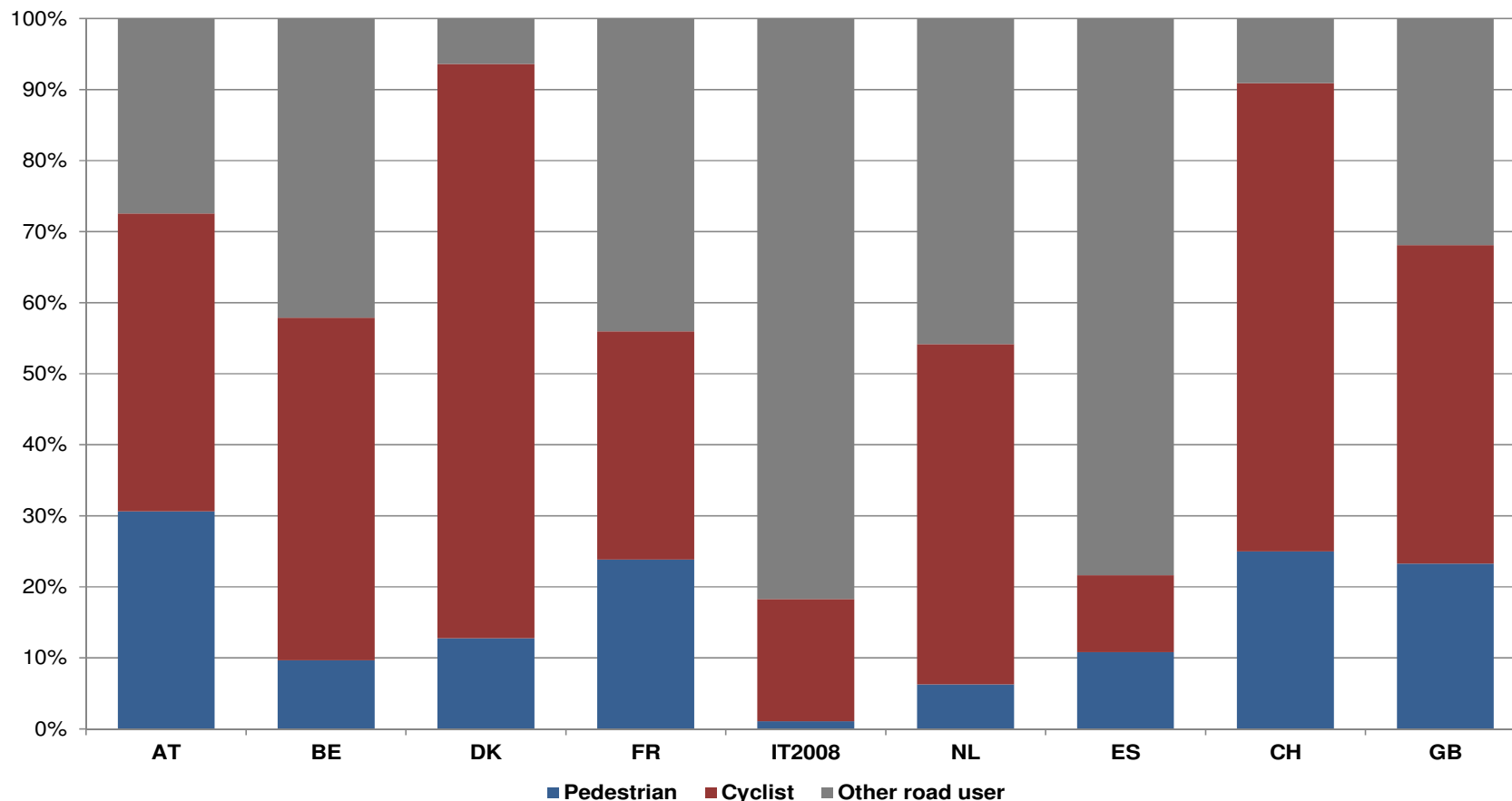
Medium Term:

- Mandatory fitment for transport of children and in trucks and buses.
- Legislate alcohol interlocks for first time high level offenders and recidivists to help them distinguish drinking and driving

Long-term:

- Mandatory fitment for non-intrusive alcohol interlocks for all vehicles.

HGVs-VRUs: Blind Spots



Percentage by type of road user of those killed or seriously injured in a collision with a goods vehicle over 3.5 tonnes performing a near-side turn. Average for the last three years available.

Vehicle measures: for VRU

- Welcome attention being given to integrated, active and co-operative safety systems
 - AEB, pre-safe, e-Call
 - All directionally sound
- Concerns
 - No trade-off with passive safety measures!
 - Evidence base is lacking for most effective systems
 - Distraction – information management
 - Adaptive behaviour
- Need a systematic feedback from real-world driving
 - FOTs can help

Next Steps for VRU Safety Technologies

- Routinely **evaluate** the safety benefits of in-vehicle and other safety technologies
- **Identify** the most life-saving technologies and the most beneficial applications and
- **Recommend** the relevant measures for their synchronised deployment (e.g. **legislation** when needed: technologies will not save many lives if they are only optional)
- Financial **incentives**, public **procurement** for safe AND clean vehicles
- **Market** for Safety: EuroNCAP

White Paper on transport

- Nearly 50% of all car trips are shorter than 5 KMs
- Governments need to promote walking and cycling

BUT

- People will not choose these means of travel unless they are made safer

Find out more

- Safety of Vulnerable Road Users ETSC Policy Paper (2005)
- Intelligent Speed Adaptation Myths and Reality (2006)
- Tackling the Three Main Killers PIN Flash (2010)
- Unprotected Road Users Left Behind PIN Flash (2011)
- Drink Driving Toward Zero Tolerance (2012)
- ETSC's Contribution to CARS 21 (2012)
- Raising the Bar Review of Cycling Safety Policies in the European Union (2012) BikePal

www.etsc.eu

