Saving lives until 2020:
Acting together to tackle drink driving

Member States' performance in addressing drink driving in the EU

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Brussels 24 April 2012

ETSC
European Transport Safety Council

Background to drink driving in Europe

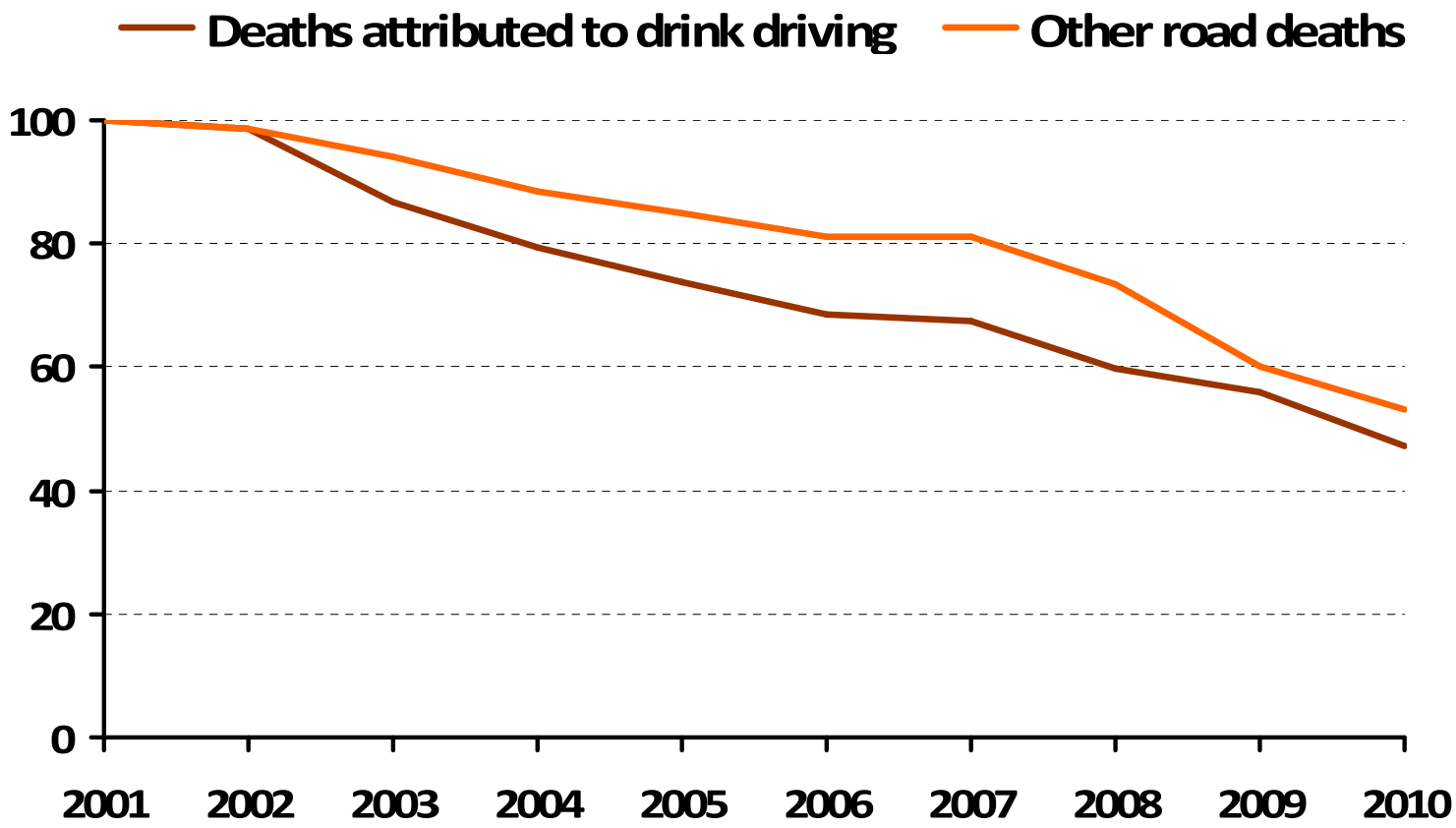
- Up to 2% of kilometres driven in the EU are driven with an illegal Blood Alcohol Concentration
- Of the 31,000 deaths in road collisions in the EU in 2010, 11% were attributed by Member States to drink driving
- But according to EC estimates, 25% of all road deaths across the EU are alcohol-related
- If so, ETSC estimates that 6500 deaths would have been prevented in 2010 if all drivers had obeyed the law on drink driving

Attributing deaths to drink driving

- Each Member State has its own way of attributing a road death to drink driving
- In 2010, 7 countries attributed fewer than 6% while 5 countries attributed more than 30%
- So it is meaningless to compare numbers attributed to drink driving in different countries
- But we can look at how the numbers of deaths attributed to drink driving have changed over recent years

Drink driving deaths in 22 countries

Relative developments in road deaths attributed to drink driving and in other road deaths in 22 EU countries – 2001 to 2010



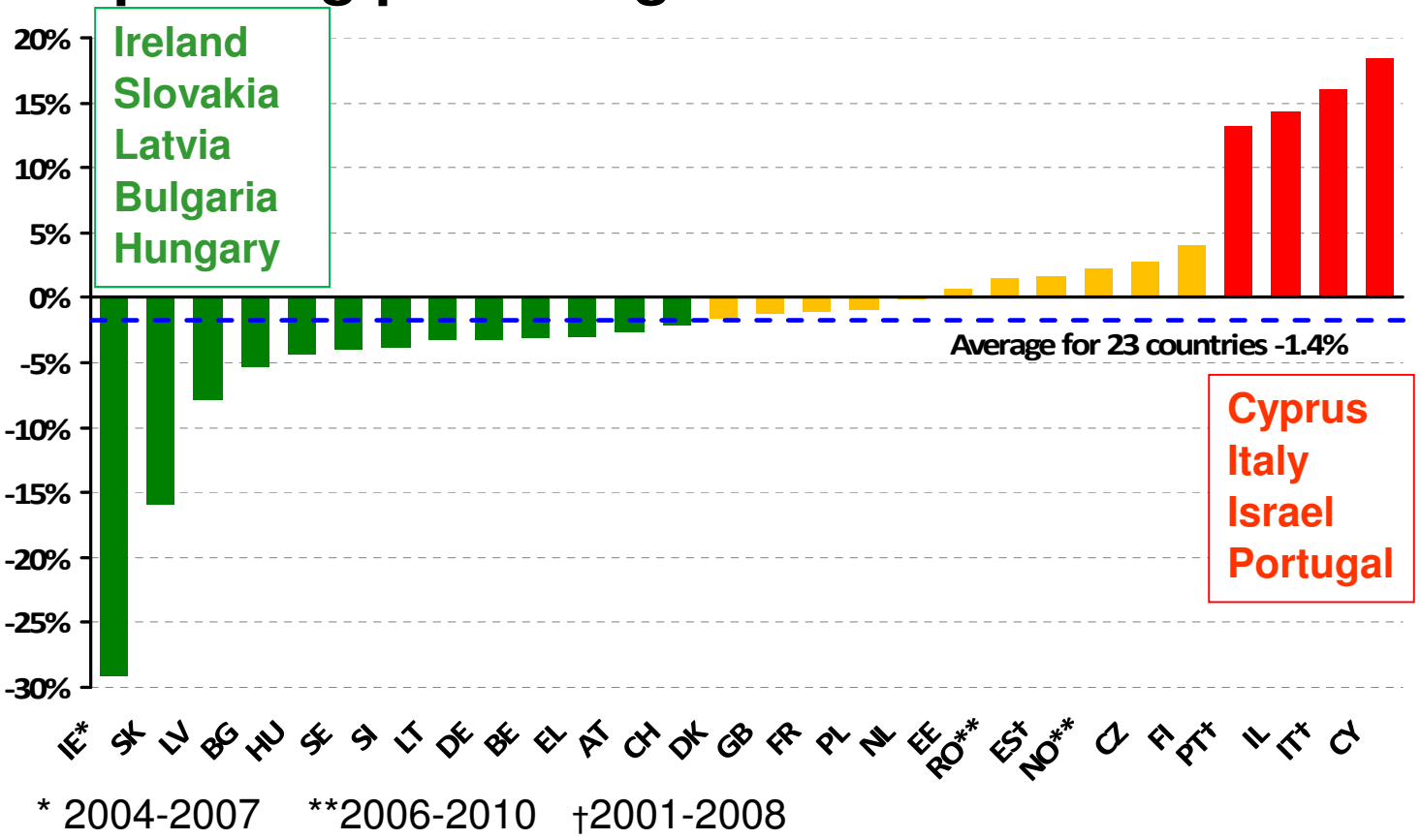
Measuring progress against drink driving

- General measures to reduce deaths on the roads also work to reduce drink driving deaths
- Measures to tackle drink driving in particular should make deaths attributed to drink driving fall in number faster than other road deaths
- So ETSC's chosen indicator of progress over the years in tackling drink driving is the

  Difference between the **average annual percentage reduction in deaths attributed to drink driving** and the **corresponding percentage reduction in other deaths**

Progress against drink driving

Difference between the **average annual percentage reduction in deaths attributed to drink driving from 2001 to 2010** and the **corresponding percentage reduction for other deaths**



* 2004-2007 **2006-2010 †2001-2008

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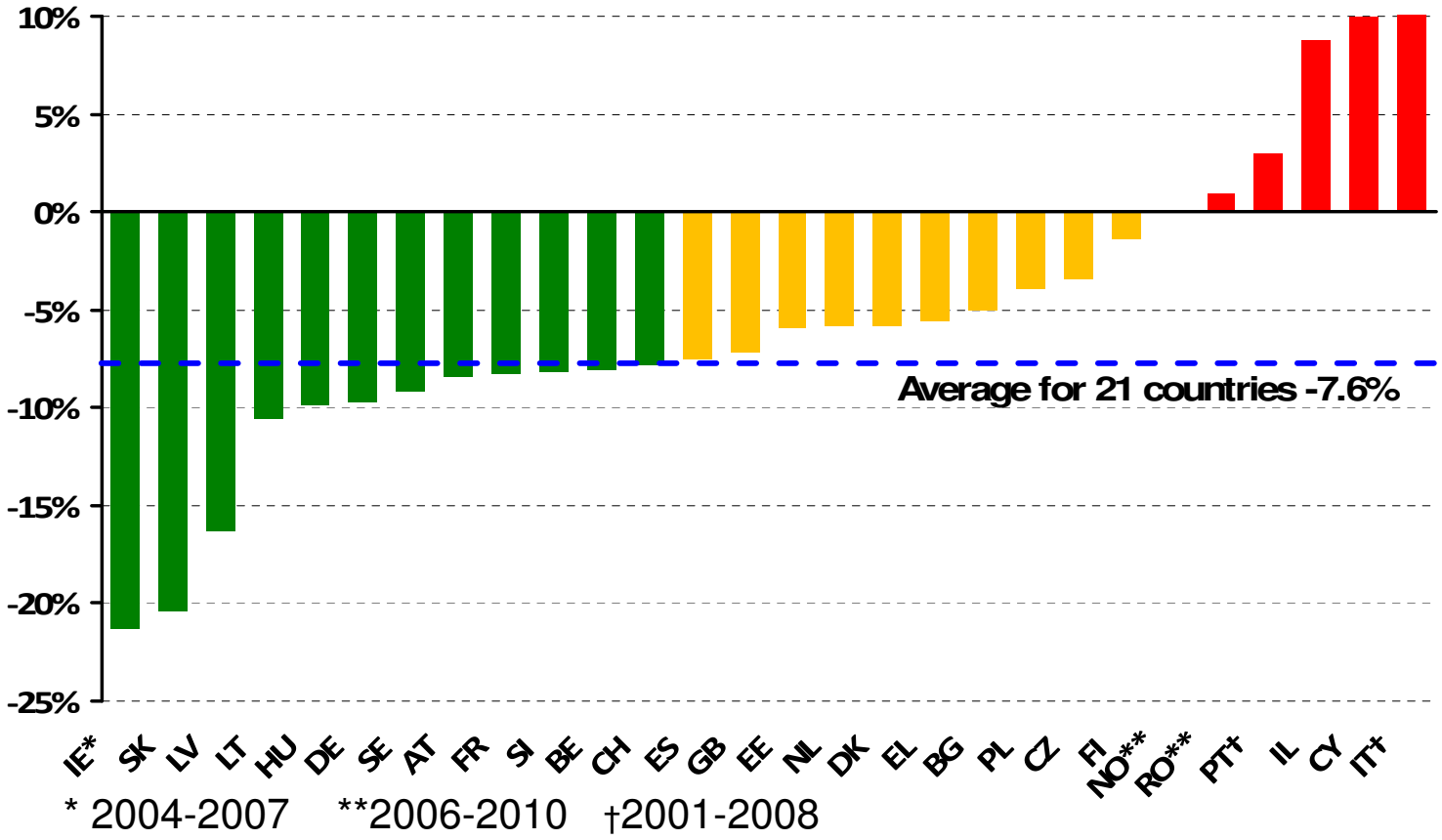
Reduction in drink driving deaths

Average annual percentage change in the number of road deaths attributed to drink driving from 2001 to 2010



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Drink driving enforcement

Numbers of roadside alcohol checks per 1,000 population and percentage above the legal BAC limit in the most recent year (usually 2010)

Country	Checks per 1,000 population	Percentage above legal limit	Country	Checks per 1,000 population	Percentage above legal limit
FI	429	0,9%	HU	120	3,6%
NO	367	0,2%	ES	114	1,8%
SE	287	0,6%	PT	106	3,8%
CY	217	5,3%	EE	105	0,7%
SI	198	4,7%	PL	88	4,9%
FR	173	3,4%	LT	40	1.7%
EL	161	2,1%	DK	36	6.7%
IE	126	1,9%	IT	27	2.5%
AT	122	3,7%	GB	14	11.6%
IL	122	1,0%			

Positive checks per 1000 population

Numbers of positive checks per 1,000 population in the most recent year (usually 2010)

CY	11.6
SI	9.3
FR	6.0
BE	5.0
AT	4.5
PL	4.3
HU	4.3
PT	4.1
FI	3.9
EL	3.1
BG	3.0
IE	2.4
ES	2.0

LV	1.9
SE	1.8
DK	1.8
RO	1.7
GB	1.6
IL	1.2
SK	1.2
LT	1.1
NO	0.9
CZ	0.8
EE	0.7
IT	0.7

ETSC recommendations to the EU

- Propose a Directive setting a **zero tolerance** for drink driving for **commercial and novice drivers**
- Encourage Member States to prepare **national enforcement plans** with targets including drink driving
- Work towards **standardised definitions** of **drink-driving** and **alcohol-related collisions**
- Introduce **uniform standards for alcohol interlocks** in the EU and help all Member States to introduce them
- Introduce alcohol interlocks firstly **for repeat offenders and professional drivers** and in due course **in non-intrusive form for all vehicles**

Recommendations to Member States

- Consider adopting a **zero tolerance** for drink driving
- Intensify **enforcement of laws** by setting **minimum targets for alcohol checks** of the driving population (e.g. one driver in 5 should be checked each year)
- Introduce **systematic breath-testing** in all Police checks related to driving or collisions
- Introduce **rehabilitation programmes** and **higher penalties** to address recidivism
- Organise regular nationwide **campaigns raising awareness of drink-driving risk**
- Develop the **use of alcohol interlocks** in rehabilitation

Thank you for your attention

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Average annual percentage reduction

Let D_n be the number of deaths in year n

With an annual percentage reduction of p per cent

$$D_n = KD_0(1 - p/100)^n \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

where K (typically ≈ 1.0) allows for D_0 being unusually high or low

To fit Equation (1) to numbers of deaths in years 0 to N

we can fit the line $\ln(D_n/D_0) = a + bn$ by least squares

Then a is an estimate of $\ln K$

b is an estimate of $\ln(1 - p/100)$

and p is estimated by $100(1 - e^b)$

Effect of drink-driving countermeasures

Suppose that in a certain country there are a total of T road deaths per year, of which A are attributed to drink driving. Then $N = T - A$ are not so attributed.

Let the average annual percentage reductions in A and N be $p(A)$ and $p(N)$ respectively.

Then if safety measures producing the reduction in N have a similar effect in reducing A, the average extra percentage reduction $p(D)$ in A due to changes in drink driving is given by
$100 - p(A) = [100 - p(D)][100 - p(N)]/100$

So $p(D) = 100\{1 - [100 - p(A)]/[100 - p(N)]\}$ is an indicator of effectiveness of tackling drink driving

And it follows that $p(D) \approx p(A) - p(N)$