



11/07 2013

Road Safety Strategies

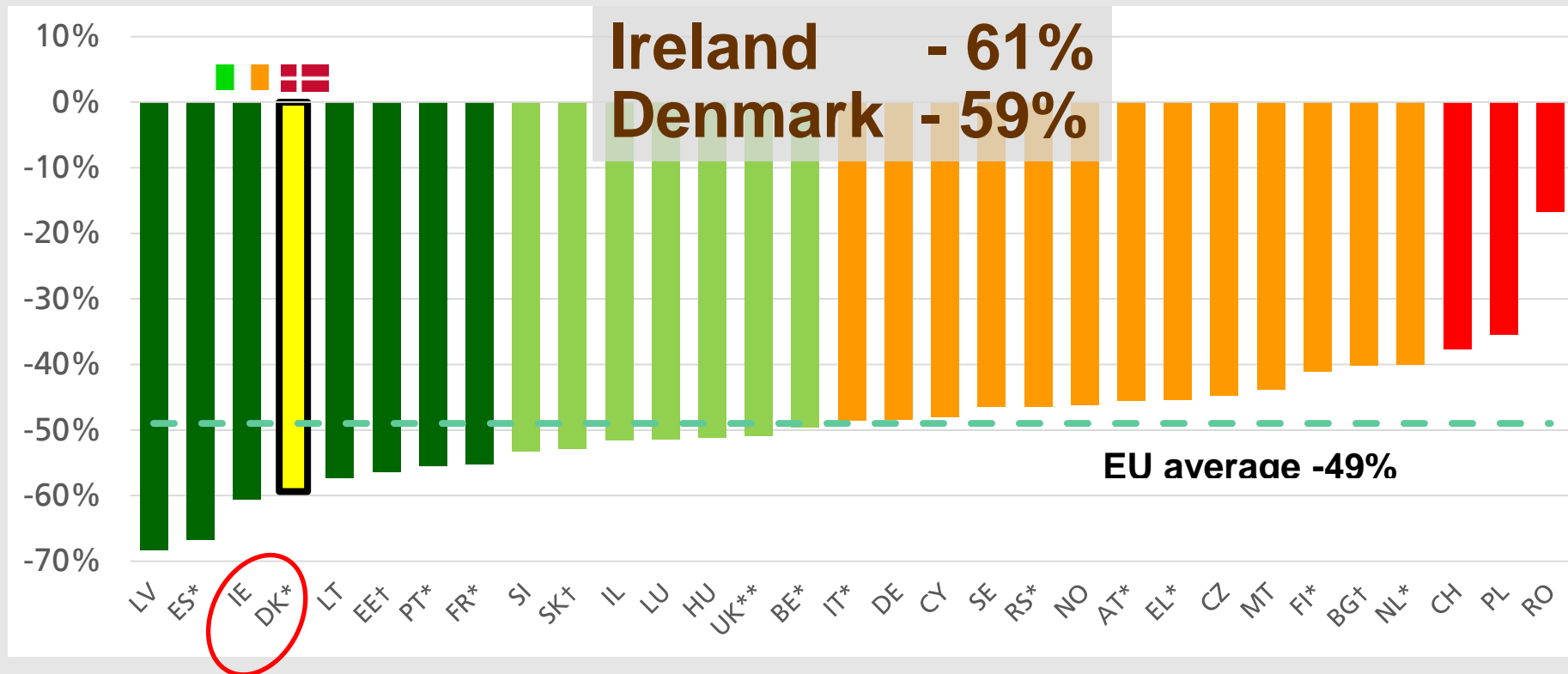
Denmark's success story in Road Safety



Jesper Sølund
Head of Documentation Department
The Danish Road Safety Council

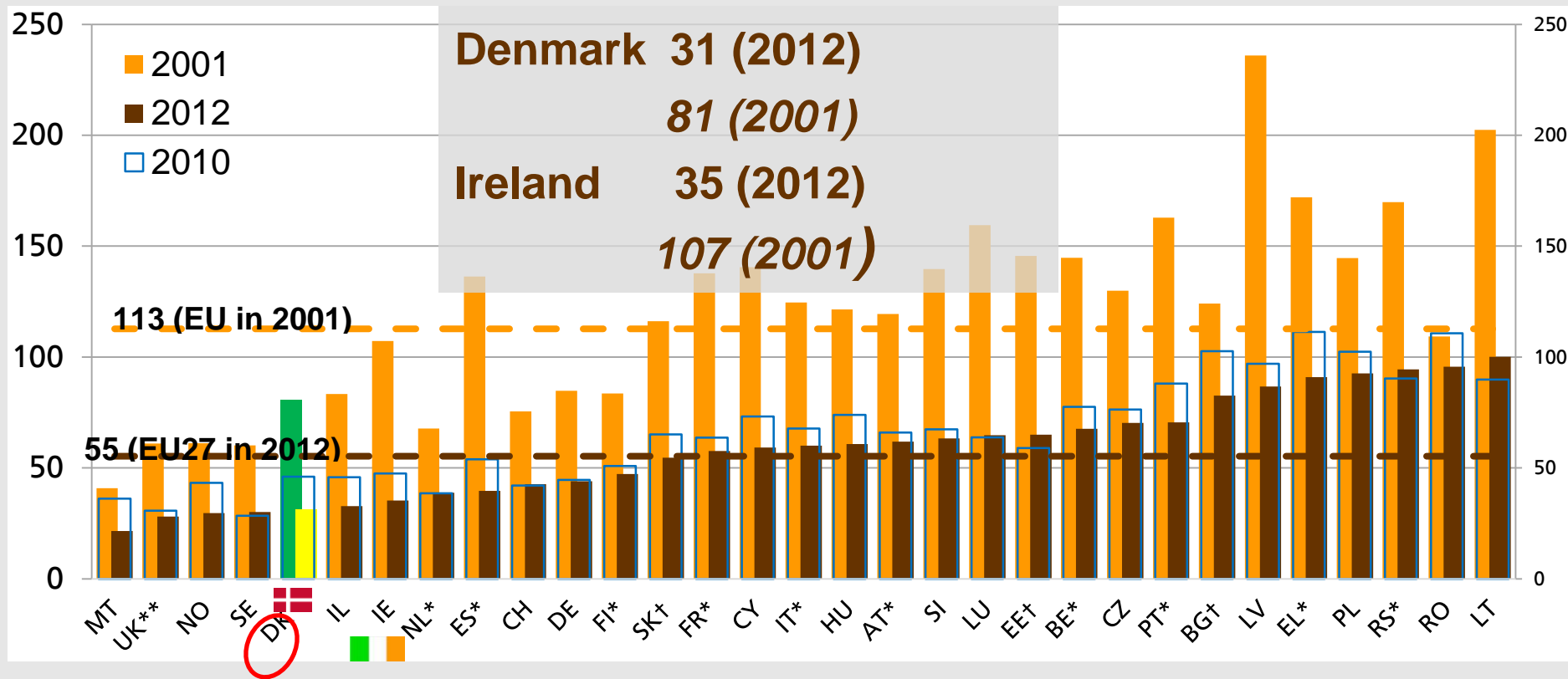


Percentage change in road deaths between 2001 and 2012





Road mortality (pr. million) in 2012 and 2001



PIN Award to Denmark 2013





Presentation

- Danish Road Safety – history
- New National Road Safety Action plan 2013-2020
- Effect of mandatory courses for drunk drivers in Denmark



The Road Safety Commission

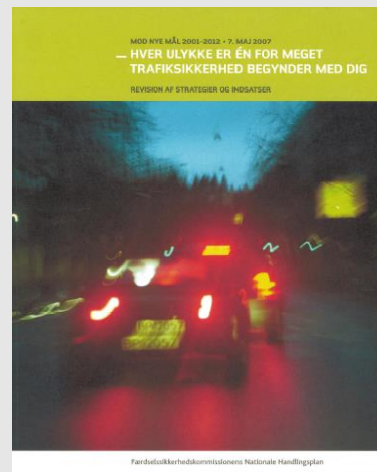
1989-2000



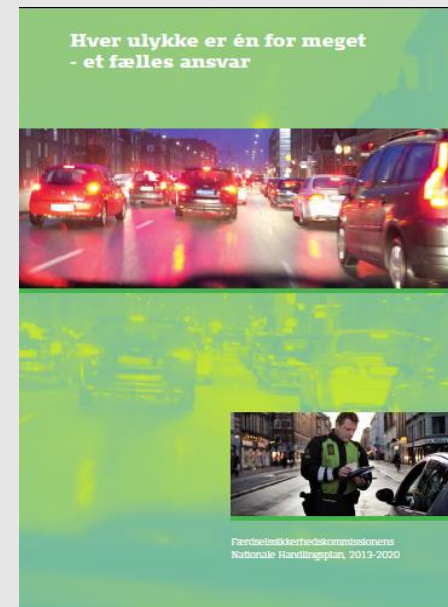
2001-2012



2006-2012



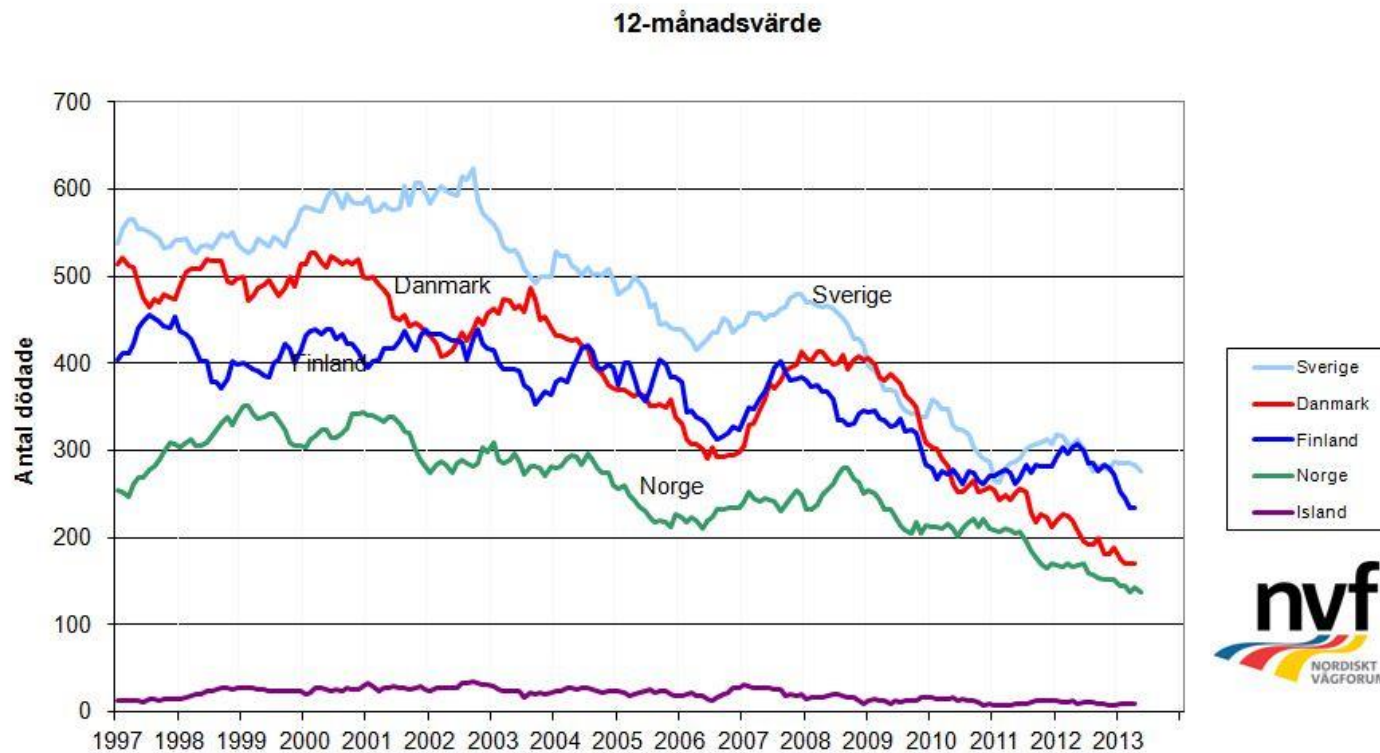
2013-2020



Direction and goals for Road Safety since 1988



Danish Road Safety - a good story





The Road Safety Commission

Task

- Set overall goals
- Inspire relevant interests
- Monitoring development
- Identify needs for new initiatives
- Propose new intervention areas/methods



Key players in the Danish Road Safety Action Plan



Positive Danish results because:

- Good accident data and accident research
- Clear objectives for killed and injured
- Long term – 12 years action plans
- Clearly defined means: Legislation, Road Engineering, control and sanctions, coordinated campaigns and communication, improved vehicle safety
- Clearly defined roles and responsibilities: Who's responsible for what
- Road safety emerging a common and personal issue involving private companies and citizens



Positive Danish results because:

- Continuous monitoring of the road safety situation and adjusting
- Inspiration from abroad, Nordic Road Safety Cooperation – “Zero –vision”, ETSC and other European Road Safety Institutions
- The Road user in Focus
- The economic crisis since 2008
- Political consensus on Road safety



Danish Road Safety Action Plan 2013-2020

Using EU target: 50 % reduction in deaths and injuries



	2010	2020
Killed	255	120
Seriously injured	2063	1000
Slightly injured	2090	1000



Road Safety Action plan 2013-2020

Focus on road user behavior

**"Every accident is one too many
- a common responsibility "**
the goals:



1. *Unconscious risky behavior and mistakes shall not cause serious accidents. (Zero vision)*
2. *Conscious risky behavior shall be minimized*

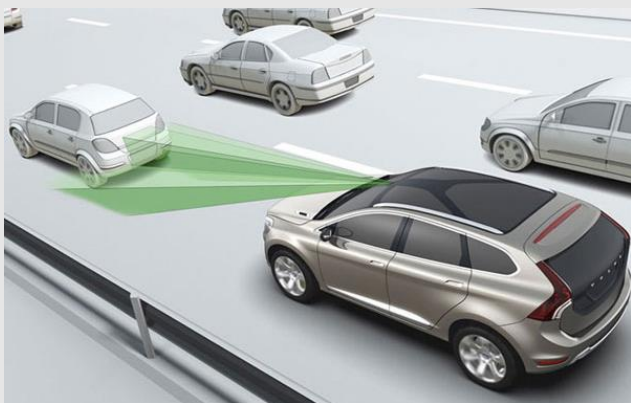
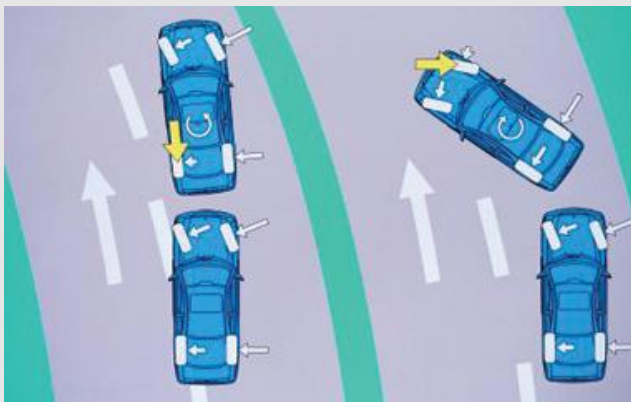
10 focus areas: Behaviour, road users, accident types	Reduction in killed
Speeding	- 59%
Drunk driving	- 25%
Inattention	- 38%
Lack of seat belt and helmet use	- 28%
Accidents involving pedestrians	- 17%
Accidents involving cyclists and moped drivers	- 20%
Accidents involving young drivers (up to 24 years)	- 19 %
Meeting Accidents – forward collision	- 23%
Solo accidents	- 28%
Accidents at intersections in rural areas	- 16%



Catalogue with 70 actions covering one or more intervention areas

Intervention area	Number of actions
Legislation, sanctions and controle	11
Education and communication	15
Road Engineering	30
Vehicle safety	12
Hospital data and digital speed map	2
Additional: Proposals for road safety research	27

Idea catalogue – will be prioritized– some actions are more effective than others



Vehicle technologies is evolving

The potential of the technology can be divided into the following 3 areas:

- Technology that prevents deliberate risk taking
- Technology that helps road users to the correct behavior
- Technology that make the accident less serious



Hospital data is important

In 2011

- **4.158** registered by police
- 36.620 registered at emergency centers
- 494 injuries only registered in hospital
- Total of **41.272** injuries related to traffic accidents



Measures against speeding

1. Vehicles

- a. Speed limitations in cars
- b. Access to the data from the “black boxes”

2. Behavior - control

- a. Explanatory campaigns
- b. Intensified speed control
- c. Digital speed map

3. Road engineering

- a. Differentiated speed on rural roads
- b. Speed calming measures.



Measures against drunk driving, drugs and medicines



1. The vehicles

- a. Alcohol interlock in cars

2. Behavior and Control

- a. General BAC limit of 0.2
- b. Campaigns against drunk driving
- c. Police control - extensive use of screening alcometre



Measures against inattention

- influence also meeting and single accidents

1.The vehicles

a. Technological solutions:

Forward collision warning, lane departure warning, fatigue driving

2. Behavior - Control

a. Campaigns against inattention and fatigue

3. Road Engineering

a. Rumble grooves on rural roads

b. Center guardrails

c. Fewer distracters

Fact Sheets – supplement the plan

Annex

- Fact sheets describing each action, efficacy, potential savings and investment
- Deepening of research needs

3.17. midterudvidelse i kurver

Fokusområde: 8

Beskrivelse

Midterudvidelse i kurver sker ved at udvide kørebansens bredde, og etablere en spærreflade mellem de to kørselsretninger mindskes risikoen for mødeulykker i kurver. En spærreflade er også med til at synliggøre kurvens forløb. Det er primært brugt i uheldsbelastede kurver på statsveje i åbent land.



Eksempel på kurveudvidelse på H714 øst for Fåborg.

Formål og virkning

En stor del af mødeulykkerne sker i kurver. Uheldene kan skyldes uopmærksomhed eller at bilisternes sigteforhold er begrænsede. For høj hastighed i kurver med en lav horisontalradius kan ligeledes medføre, at midterlinjen bliver krydset med mødeuheld til følge. Uheldsmæssig kombination af en vertikalcurve over en konveks kurve kan desuden medføre, at vejens forløb ikke er synligt for trafikanten.

Mødeuheld i åbent land er karakteriserede ved, at de har en meget høj alvorlighedsgrad. Etablering af en spærreflade mellem kørselsretningerne er med til at modvirke mødeuheld grundet den større afstand mellem modkørende.

En spærreflade kan ikke som autoværn forhindre trafikanten i at komme over i modsatte kørebane, men udvidelsen af afstanden mellem kørselsretningerne giver forøget mulighed for at påkørsel undgås eller kan afværges.



Mandatory courses for drunk drivers – effect study i Denmark

Since 2005, all drivers who are sentenced for drunk driving ($> 0,5$ BAC) must attend a mandatory course in "Alcohol and Traffic" as a one of the conditions to regain their license

The effect of the course what evaluated in 2009 by The Technical University, Institute for Transport through qualitative and quantitative interviews and a before/after study.



The course

- 10 hours, divided into 4 sessions of 2 ½ hours
 - 1 session pr. week
 - Price: 2.500 DKR (350 Euro)
 - No treatment/rehabilitation!
 - Approx 12 participants pr. course
-
- Administered by The Danish Regions
 - Teachers: Alcohol consultants



Aim

- Lowering the risk of drink driving by influencing the general alcohol consumption of the participant,
- Teaching alternative strategies, when it comes to the mixture of alcohol and driving



**Reducing
recidivism**



Evaluering af kurser i alkohol og trafik (A/T-kurser)



Gitte Carstensen
Lotte Larsen
Maj 2009

Results

- Before/after study: Recidivism to drink driving was reduced with 40 %, among those who attended the course, compared to those who didn't (before 2005)
- There is an overall satisfaction with the course, but it could be improved. For example by conducting different courses to different groups of offenders (alcohol abusers, young drivers etc.)



**Keep up the good spirit in
the Irish Road Safety Work**

Thank you for your attention.

<http://www.youtube.com/watch?v=YQKAGn-NEXA>