Relevance and Scope of Directive : 2003/59/EC

Contribution to Stakeholder Conference, Brussels, 6 March 2014

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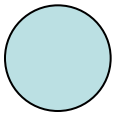
Relevance and scope of the Directive on training of professional drivers

Content

- Causes of crashes, human error and training
- Objectives of Directive 2003/59/EC
- Some comments on the relevance, the effectiveness and efficiency, and the EU added value of the Directive
- Expanding/extending the scope of the Directive?
- Some thoughts for discussion



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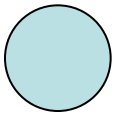
Nature of risks in road traffic

- Combination of *basic risk* factors (speed, physical vulnerability, mass/protection) and *risk increasing* factors (drinking and driving, speeding, violations, inexperience, inattention, etc.)
- Everybody is a road user and can enter the system; only professional drivers can be selected
- Safety is not a design requirement of the road transport system, but a 'compromise'
- Many actors/stakeholders have responsibilities to manage risks
- No single approach to achieving world-class results



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Train crash in Amsterdam, 21 April 2012: 75 light, 42 serious injuries, 1 fatality

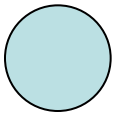
Two approaches to the human fallibility

- Person approach vs. System approach

Person approach: 'Bad things happen to bad people'

- This approach focusses on unsafe acts by individuals: errors and (procedural) violations:
  - Forgetfulness, moral weakness, inattention, poor motivation, carelessness, negligence, recklessness

- Management response: campaigns that appeal to people's sense of fear, writing another procedure (or adding to existing ones), disciplinary measures, threat of litigation, retraining, naming, blaming, and shaming



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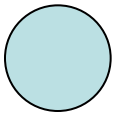
System approach: humans are fallible and errors are to be expected

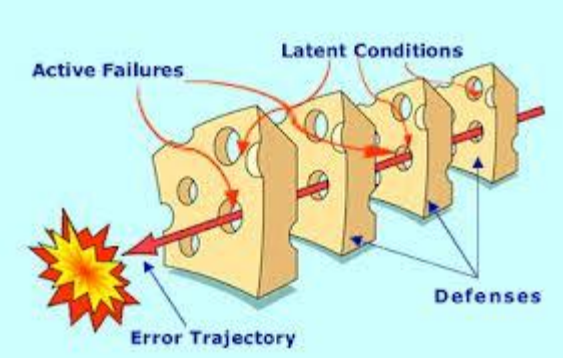
- Errors are seen as consequences rather than causes, having their origins not so much in the perversity of human nature but in "upstream" systemic factors

- Countermeasures are based on the assumption that, though we cannot change the human condition, we can change the conditions under which humans work

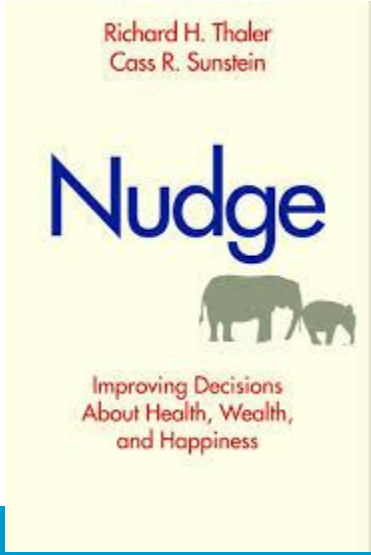


Understanding human choices, errors/violations and crash causation

- Swiss cheese model developed by James Reason (1990), used in aviation, engineering, healthcare, etc.



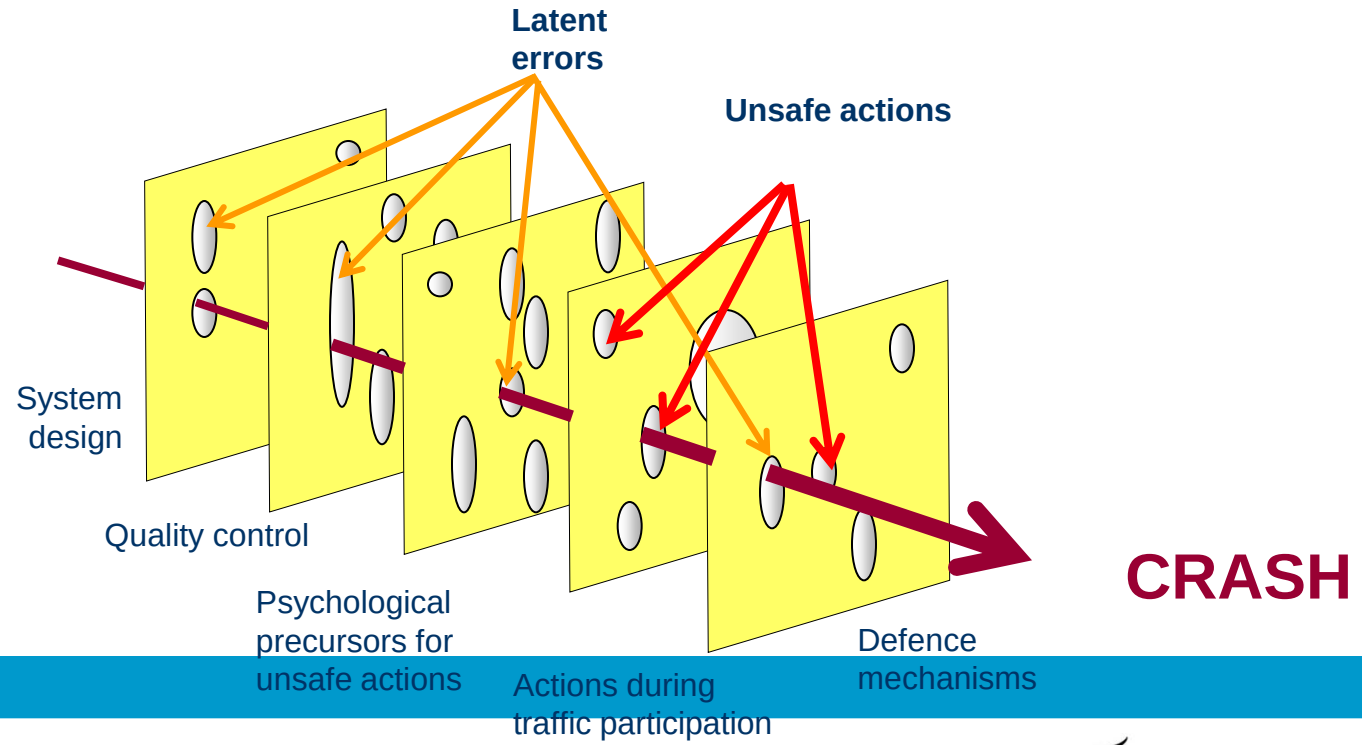
- 'Nudging behaviour' (Thaler & Sunstein, 2008)

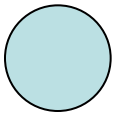


Prevent latent errors

System approach: prevention of latent errors (system gaps)

- Intervene as early in chain as possible
- Make unsafe actions less dependent from choices of individual road users





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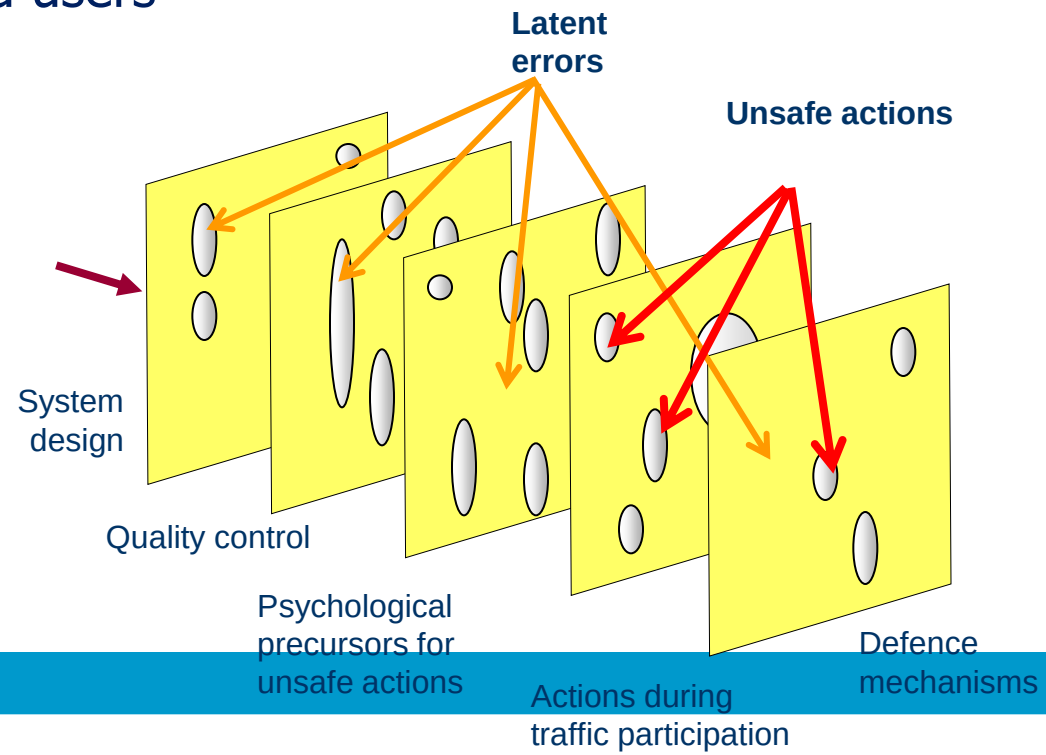

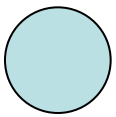

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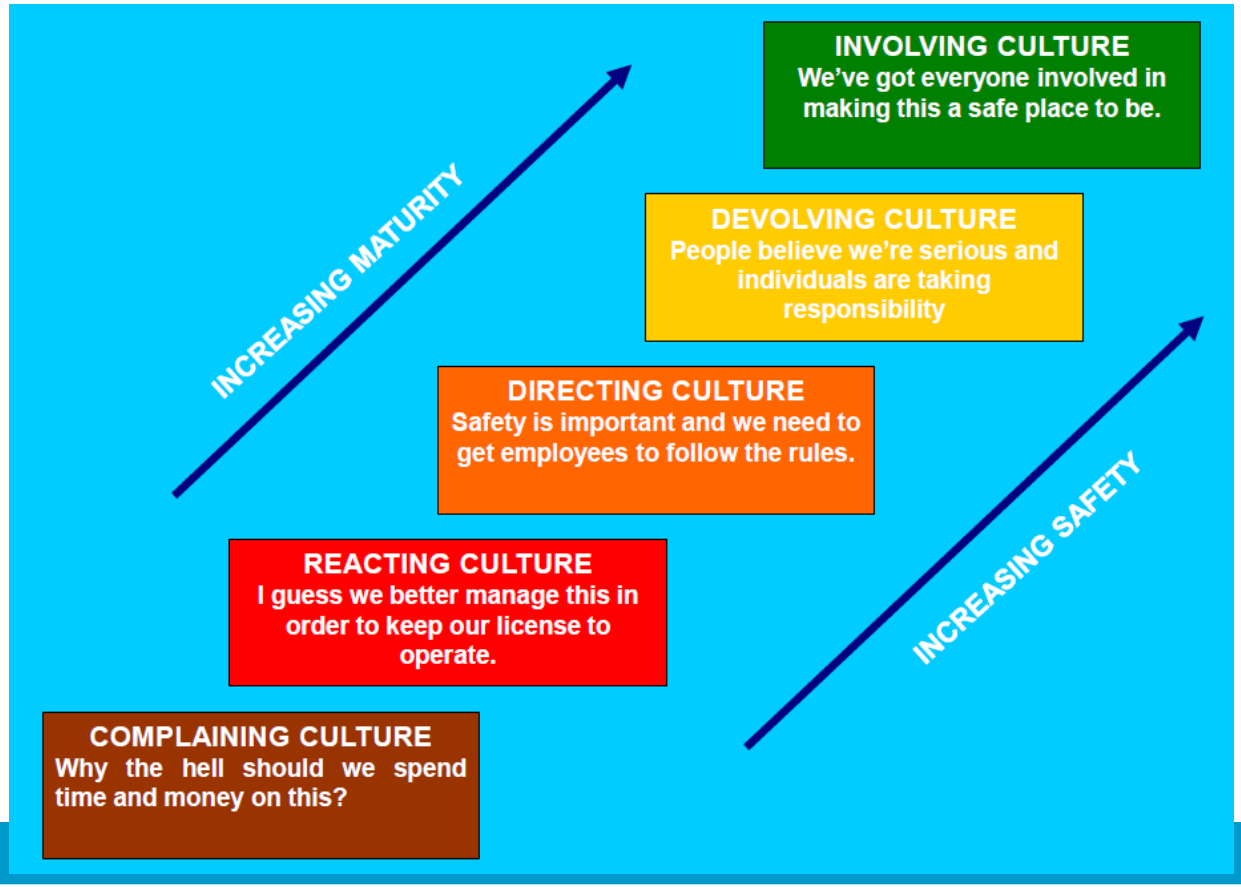
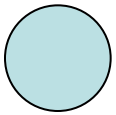
Health, safety and environment ladder (Hudson, 2007)





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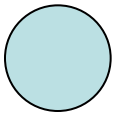
Our fundamental road safety problem

- Today's road traffic is *inherently* unsafe
- The road system of today has not been designed with safety in mind, as is the case with air transport or rail transport
- Which means we are almost fully dependent on whether a road user makes a mistake or error in preventing a crash
- Another approach is needed: *Safe System Approach*



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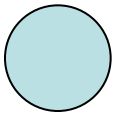
Putting people at the center

- The road system should be designed to expect and accomodate *human error*, because it is inevitable that road users make mistakes and sometimes violate the law (and crashes occur)

  (This concept has been accepted and implemented in other sectors of transportation, health, engineering, etc.)
- In a crash, interaction between vehicle – roadway – human body must be managed so that serious injury likelihood is minimized, if not eliminated



Training (of professionals) as a component in a chain

- …"policymakers, authorities, training providers, industry and many more are equally asked to contribute to the assurance of a high quality" (coming from a ProfDRV-leaflet)

- Put training of drivers in the right perspective and context, and consider it as one of the components to deliver professional quality and to improve road safety

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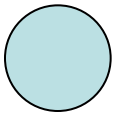
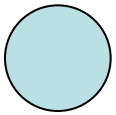
Two important misconceptions on (causes of) road crashes

- Road crashes have always one cause only; in stead, almost always many factors contributed
- In almost all road crashes the human being is to be blamed; so, just educate them better and enforce legislation more strictly



Objectives of Directive 2003/59/EC

- Contribution to the free movement of drivers
- Defining standards of professional competence
- *Improving road safety and safety of the drivers*
- *Setting a level playing field of drivers and companies*
- Attracting more drivers to freight and passenger transport
- Improving the emissions within the EU road transport sector



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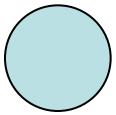
Relevance: leading to a level playing field?

- Good and similar quality of professional drivers (minimum qualifications and training requirements)?
- Costs/organization/exemptions?
- Mutual recognition?

- If a Directive leaves 'freedom in implementation' to Member States (political decision!), the result will be no level playing field
- Which are the negative consequences of this freedom?



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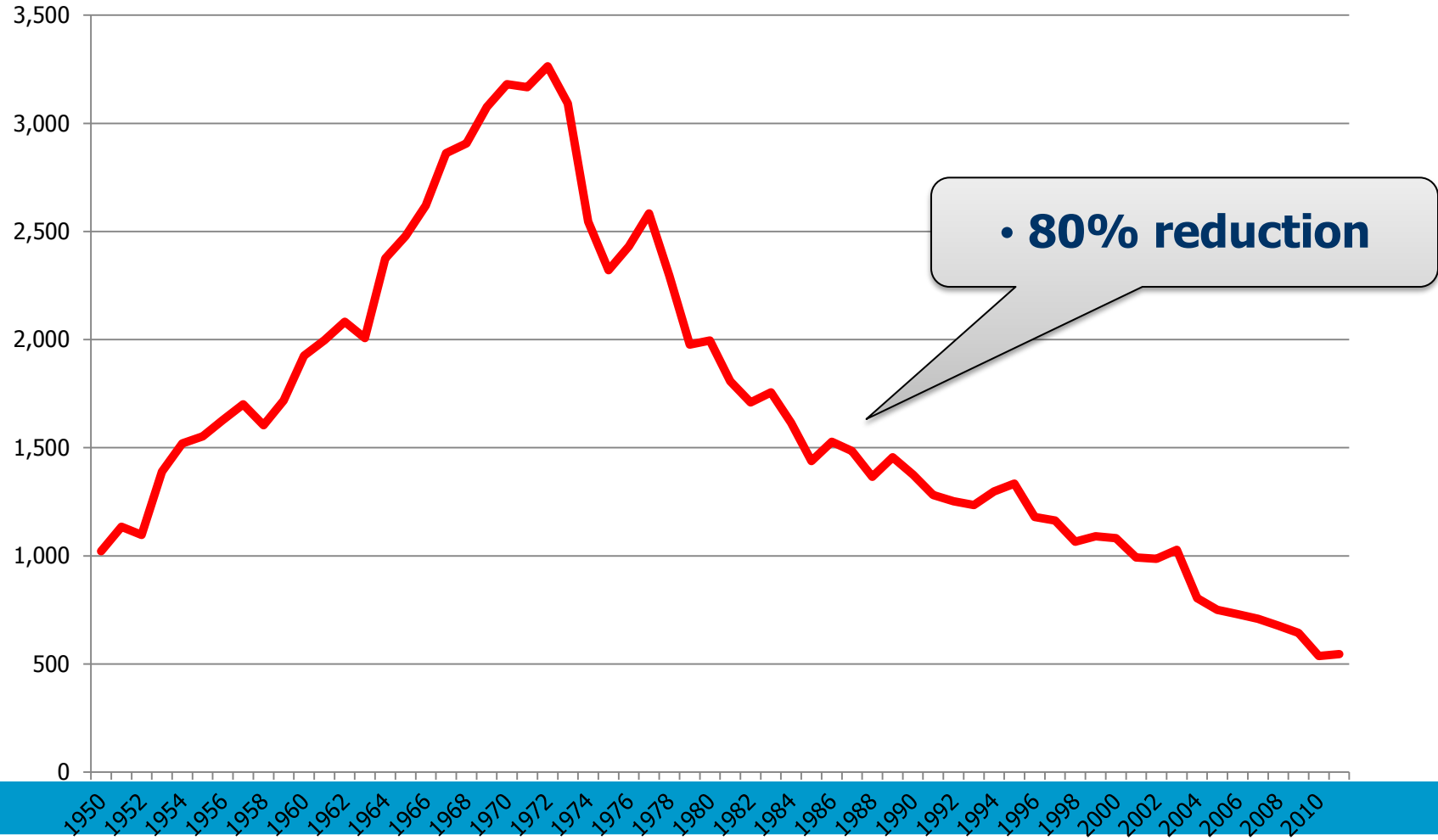
Effectiveness: development number of road fatalities in the Netherlands



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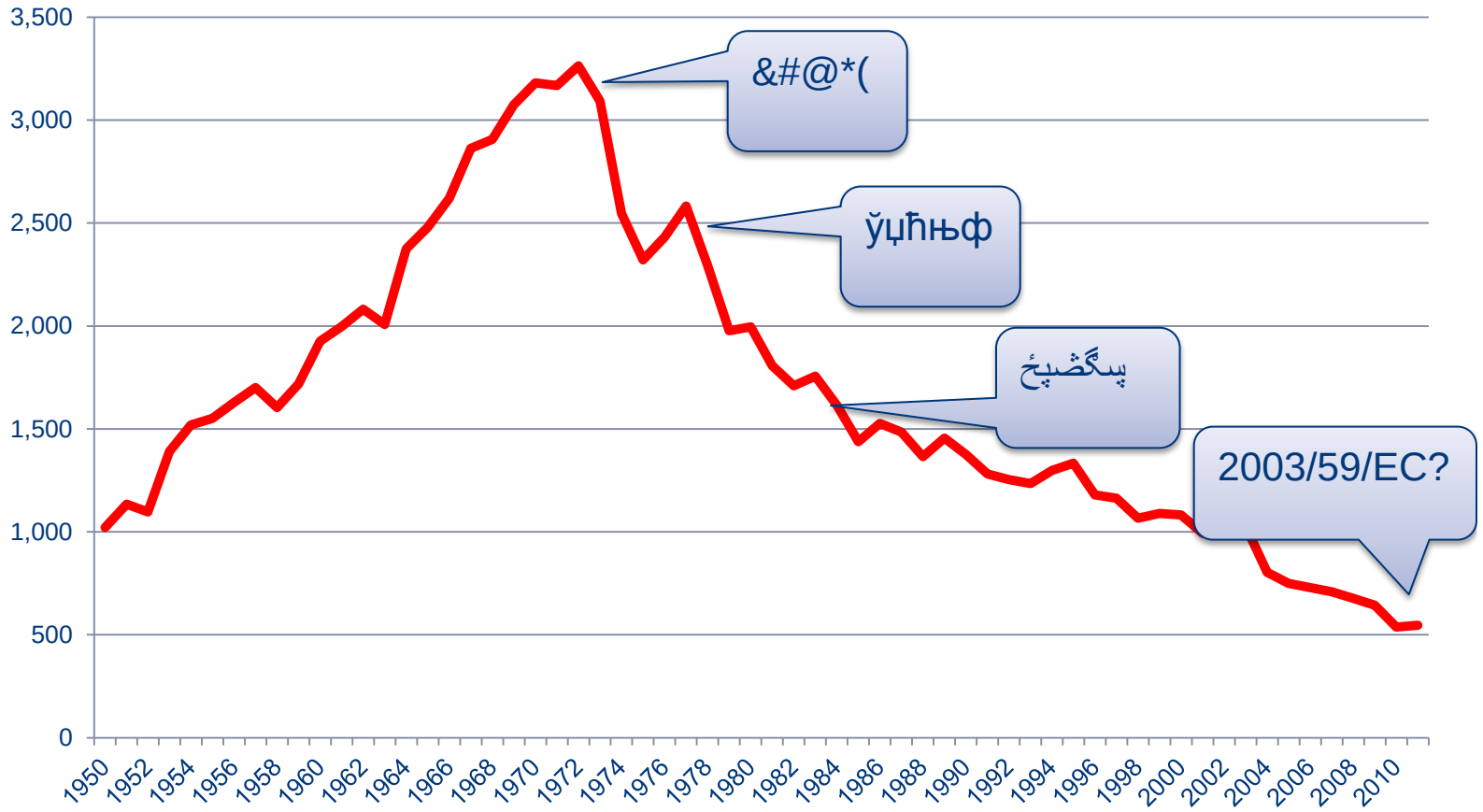
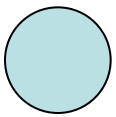
Explaining downward trend is not so easy; successes claimed by many





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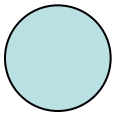
Is 2003/59/EC effective (in bringing down the number of casualties)?

- The academic literature is not too optimistic (Mayhew, Christie, and others) for finding any safety effect of (improving) training, with the exception of Graduated Driving Licensing and accompanied driving
- If a safety effect of 2003/59/EC has to be found (casualty reduction), a focussed research design is required



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Efficiency: benefits compared to costs; c/b and c/e

- A study on the efficiency of the Directive is a scientific challenge, but it has policy/political dimensions
- An example: side underrun protection on trucks

Side underrun protection Chassis skirt

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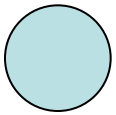
How to decide on underrun protection?

- Open underrun protection is effective; closed is more effective
- Both are cost effective; open is more cost effective
- From a societal point of view: closed underrun is to preferred; from an investors point of view: open

Expanding/extending the scope to all professional drivers?

- In principle yes,
  - Good from a perspective of further *professionalisation* of this industry
  - Our societies are expecting top class pilots, train drivers, captains of vessels; so why not for the road?
- Unless …
  - The Directive is proven ineffective and has no added value
  - Complicated implementation, if expanding
  - Other effective quality assurance mechanisms are already in place



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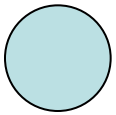
EU added value in this case?

- Subsidiarity principle = a political principle
- Can a Directive be (made) effective and efficient?
- Can a Directive be a good tool for creating a level playing field?
- My response: if the markets are vulnerable for perverse incentives ('imperfect market'), a role can/must be given to the public sector
- My response: If the market is an international one, that public sector is/could be the EU



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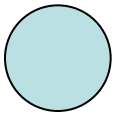
Some thoughts for discussion on relevance and scope

- Base next steps with Directive 2003/59/EC on a good insight in the nature of risks in traffic, in management of these risks and place qualification and training of professional drivers in a proper perspective
- When assessing relevance, effectiveness, efficiency of this Directive: use evidence based information
- Expanding/extending scope: yes, unless …
- EU added value; yes



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