Vision Zero – driving force for change.

Swedens approach to Road Safety

Presentation at the Launching of the Decade of Action

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The road transport system is an open and complex system

- Infrastructure
- Vehicles
- Road users
- Transports of goods and passengers
- Road users on duty
- Companies and organisations

- Rules and regulations
- Enforcement
- Etc.
Today’s road transport system

- Major mismatch between components of the system
- Trade-off between health and benefits allowed
- Unclear responsibilities
- Unclear safety philosophy
- Weak driving forces for change
Vision Zero ≠ Zero Fatalities
(At least not only)
Vision Zero = 5 dimensions
(or more?)

1. vision for many stakeholder
2. ethical platform
3. driving forces for change
4. shared responsibility
5. safety philosophy
Shared responsibility

System designers are responsible for the design, operation and the use of the road transport system and are thereby responsible for the level of safety within the entire system.

Road users are responsible for following the rules for using the road transport system set by the system designers.

If the users fail to comply with these rules due to a lack of knowledge, acceptance or ability, the system designers are required to take the necessary further steps to counteract people being killed or injured.
Safety philosophy

• Inspiration from other areas (i.e. occupational health and safety)
• People make errors, mistakes and misjudgements
• There are biomechanical tolerance limits
• The chain of events can be cut at many places

• Focus on injuries not crashes
Shared visions
Shared customers

Car

Road

Road User
Intersection with problems
Focus on crashes results in signals
Focus on injuries results in roundabouts
Speed limit, road design and car design goes hand in hand!

Crash test 90km/h into tree

Crash test 90km/h into guard rail
2+1 roads

First built in 1998

Now 2100 km

Up to 90% reduction in fatalities

Production cost 200-300 US$/meter

Widely accepted among road users
A modern camera system

Installation of 1000 radar/cameras between 2006-2009

Followed by an information strategy:

”Sweden’s new lifesaver”
Every company having personnel out in the road transport system is responsible for the safety of the employees.
Multi-disciplinary Crash Investigation (MDCI)
Road traffic safety (RTS) management systems — Requirements with guidance for use

Warning

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What about enforcement?

- In our view, enforcement is necessary to build and reinforce norms!
- Technology can never replace norms – but norms can drive technology further, i.e., more speed enforcement create demand for technical solutions like ISA
- Norms should be important to corporations – not only individuals – enforcement should target corporations more than today!
Vision Zero Academy

- In early July 2010 the Director General of the Swedish Transport Administration decided to initiate the Vision Zero Academy
- The Academy is a joint venture of the Swedish Transport Agency and Universities
- Widespread knowledge on how innovation and implementation can be rapid and systematic
- Scientific methods and policy advice are cornerstones
# Obtaining numeric interim target

## 2020

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Objective</th>
<th>Start</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Speed (rural)</td>
<td>80 %</td>
<td>43 %</td>
<td>88 lives</td>
</tr>
<tr>
<td>2. Speed (urban)</td>
<td>Increase by 86 %</td>
<td>Not defined</td>
<td>29 lives</td>
</tr>
<tr>
<td>3. Alcohol</td>
<td>99,9 %</td>
<td>99, 76 %</td>
<td>30 lives</td>
</tr>
<tr>
<td>4. Seat belt</td>
<td>99 %</td>
<td>96 %</td>
<td>40 lives</td>
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<tr>
<td>5. Bicycle helmet</td>
<td>70 %</td>
<td>25 %</td>
<td>10 lives</td>
</tr>
<tr>
<td>6. Car safety</td>
<td>100 %</td>
<td>60 %</td>
<td>90 lives</td>
</tr>
<tr>
<td>7. Heavy vehicles</td>
<td>100 %</td>
<td>0 %</td>
<td>25 lives</td>
</tr>
<tr>
<td>8. Rural roads</td>
<td>75 %</td>
<td>52 %</td>
<td>62 lives</td>
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<tr>
<td>9. Urban roads:1</td>
<td>Not defined</td>
<td>25 %</td>
<td></td>
</tr>
<tr>
<td>10. Urban roads:2</td>
<td>Not defined</td>
<td>50 %</td>
<td>30 lives (9+10)</td>
</tr>
<tr>
<td>11. Emergency</td>
<td>Not defined</td>
<td>Not defined</td>
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<tr>
<td>12. Fatigue</td>
<td>6 %</td>
<td>12 %</td>
<td></td>
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<tr>
<td>13. Valuing of road safety</td>
<td></td>
<td></td>
<td>20 lives (11,12,13)</td>
</tr>
</tbody>
</table>
Elements of Safety Management System

- Results focus
- Coordination
- Legislation
- Funding and resource allocation
- Promotion
- Monitoring and Evaluation
- Research and Knowledge transfer
Thank You!

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