

# **Vehicle safety - A key factor in road traffic safety**

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The Swedish National Road Administration

# The road transport system is an open and complex system

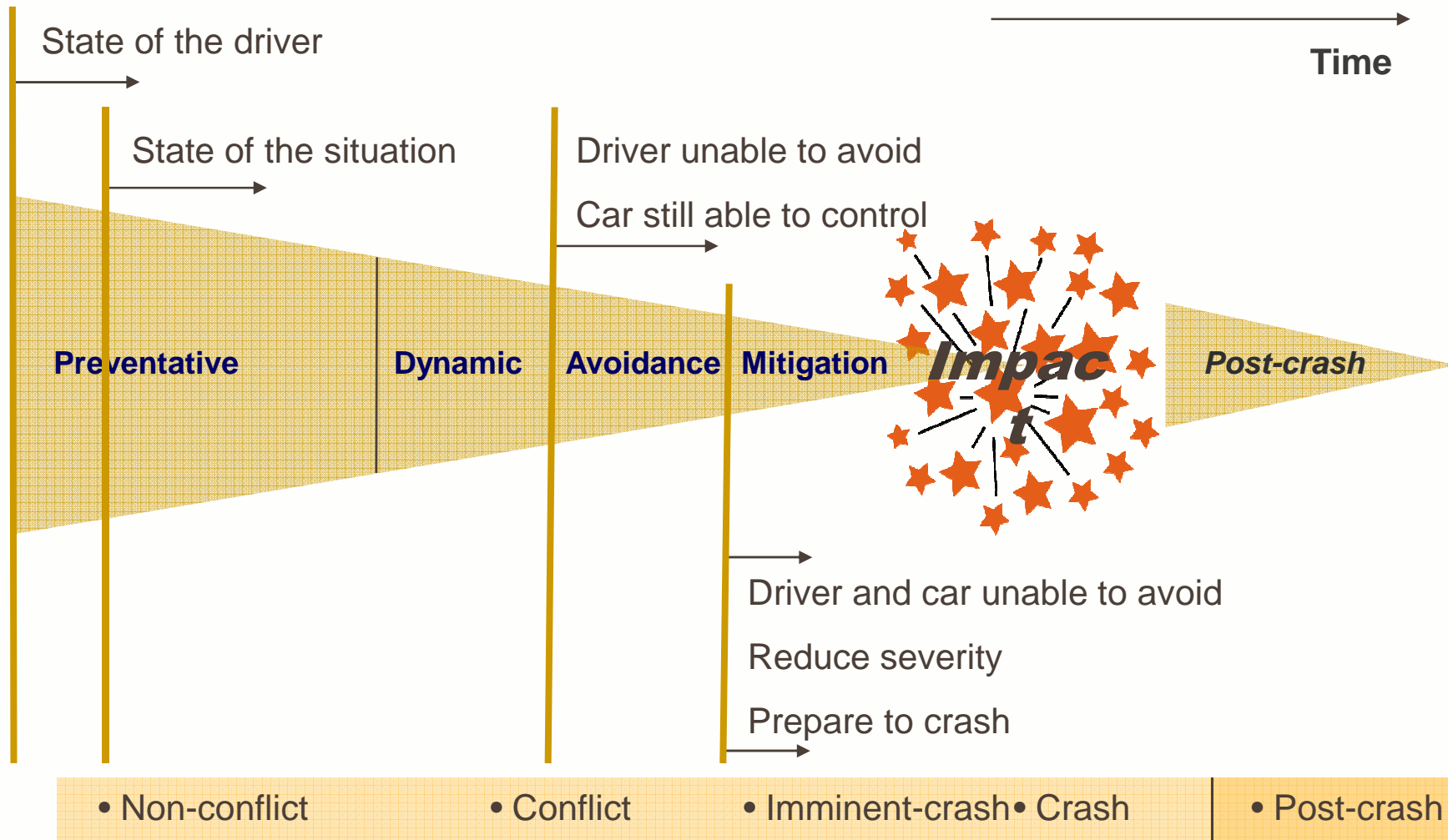
- Infrastructure
- Vehicles
- Road users
- Transports of goods and passengers
- Road users on duty
- Companies and organisations
- 
- Rules and regulations
- Enforcement
- Etc.



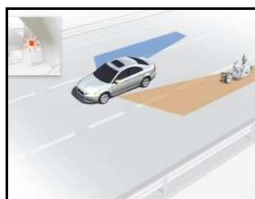
Our vision is to design cars that should not crash  
and by 2020 no one will be killed or injured in a  
Volvo



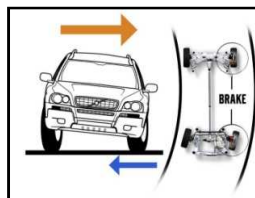
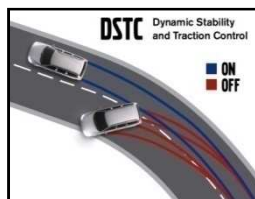
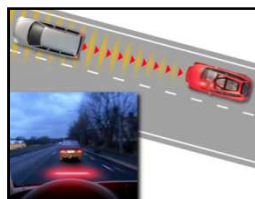
# The Holistic View of Safety



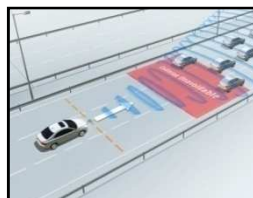
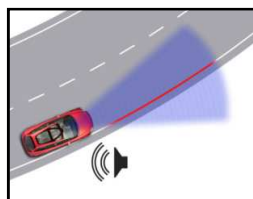
BLIS  
Driver Alert Alcolguard  
IDIS



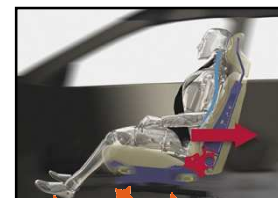
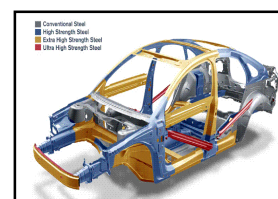
DSTC  
RSC  
FCW



Emergency Lane Assist  
City Safety  
Collision Mitigation



Safety Cage  
Inflatable Curtain  
Whiplash Prevention System



**Preventative**

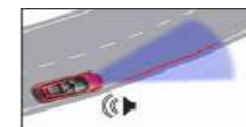
**Dynamic**

**Avoidance/Mitigation**



**Post-crash**

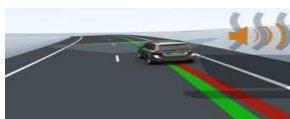
# We need to be problem oriented



Technology



Problem



Problem

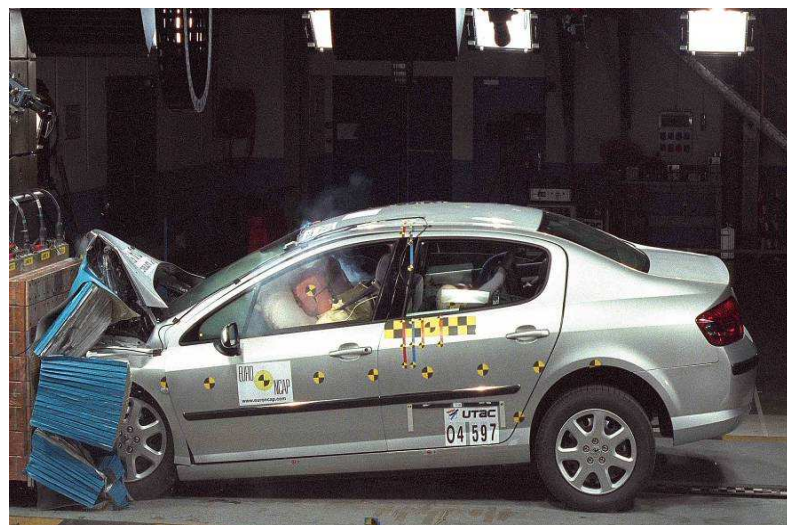


The important



Technology

## The Vehicles

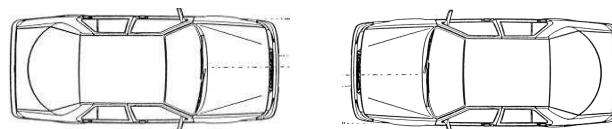


## The roads and streets

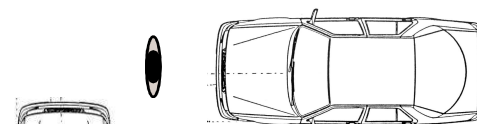
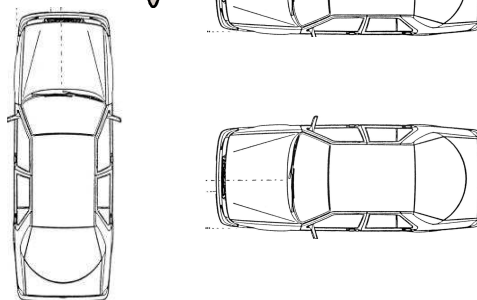


## The road use

## Safe conditions (km/h)

**70**

Front to front

**30**Unprotected Road  
Users**50**

Side to front

Modern cars, belted users  
Rapidly developing

**30****50****50****70**

# Vision Zero forms a basis

Vision Zero not only Zero fatalities

Vision Zero, 5 dimensions

1. vision for many stakeholders
2. ethical platform (right to survive)
3. shared responsibility
4. safety philosophy (failing human)
5. driving forces for change



# THE TYLÖSAND DECLARATION

## Articles

1. Everyone has the right to use roads and streets without threats to life or health
2. Everyone has the right to safe and sustainable mobility: safety and sustainability in road transport should complement each other
3. Everyone has the right to use the road transport system without unintentionally imposing any threats to life or health on others

# THE TYLÖSAND DECLARATION

## Articles

4. Everyone has the right to information about safety problems and the level of safety of any component, product, action or service within the road transport system
5. Everyone has the right to expect systematic and continuous improvement in safety: any stakeholder within the road transport system has the obligation to undertake corrective actions following the detection of any safety hazard that can be reduced or removed.

# Management systems help organisations deliver by systematic work and management

- ISO 9001 (Quality)
- ISO 14001 (Environment)

A management system for road traffic safety can help organisations to be better

- Proposed ISO 39001 (Road-traffic Safety management systems)

ISO TC 241/SC N **9**

Date: 2008-10-1

**ISO/WD 39001**

ISO TC 241/SC /WG

Secretariat: SIS

## Road traffic safety (RTS) management systems — Requirements with guidance for use

### Warning

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

## **TRAVEL POLICY IN COMPANIES**



**Everyone company has a responsibility to assure  
safety**

# SRA short or long term rental

## **Cars rented for less than 6 months must also meet the following requirements:**

Be awarded 5 stars for occupant protection by Euro NCAP

Be equipped with an antiskid system (Electronic Stability Control, ESC)

Be equipped with a seatbelt reminder on the driver seat that meets Euro NCAP requirements

Protection against whiplash injury shall be assessed as at least a “yellow” on the SRA system or as “acceptable” in a Thatcham dynamic test.

## **Cars rented for more than 6 months must also meet the following requirements:**

Be awarded at least 2 stars for pedestrian protection by Euro NCAP

Be equipped with an alcohol ignition interlock

Be equipped with an informative or supportive Intelligent Speed Assistance system (telling the local speed limit and/or issuing a warning if this is exceeded)

# What Can a Country do to Promote Safer Vehicles

- Include vehicle safety in the traffic safety work
- Support Euro NCAP and actively use the results
- Support every organisation that want to use vehicles safety
- Look at management systems (ISO 39000)
- Use travel policies
- Be the market (All governmental bodies must only buy..)
- Get occupational health and safety on-board
- Follow up new technologies (to give advice)

# Contacts

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