



European Commission

Enterprise and Industry  
Directorate-General

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# **CARS 21: A Competitive Automotive Regulatory Framework for the 21<sup>st</sup> Century**

**UNECE Working Party 29  
142nd session, 26-29 June 2007**

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# CARS 21: The Strategic View

## High Level Group CARS 21:

- “Competitive Automotive Regulatory System for the 21st Century”
- Objective: Review of existing regulation and definition of a predictable regulatory environment
- Deliverable: Priorities on Safety and Environmental Issues
- Roadmap for the next 10 years

# Main Results of CARS 21

## Regulatory Policy:

- **International harmonisation:** increase the harmonisation of motor vehicle regulations through the **United Nations framework**
- **EC type-approval system:** continue with the current system but provide for self-testing and virtual testing

# Roadmap Better Regulation

**Replacement  
of EU  
Directives  
by references  
to UNECE  
Regulations**

**Virtual testing**

**Self-testing**

**Application of better regulation principles**

2006

2008

2010

2012

2014

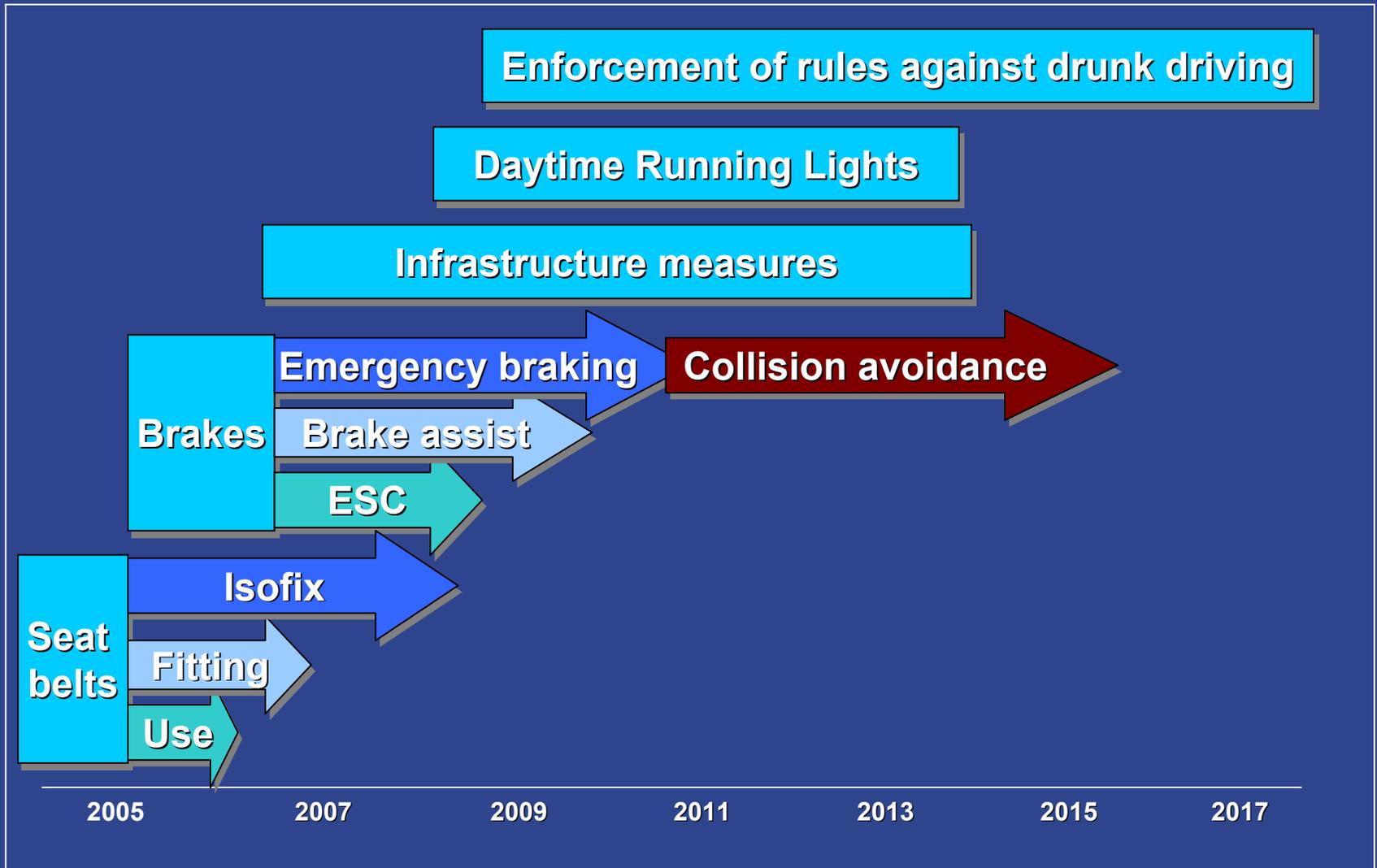
2016

# CARS 21 – Safety Issues

## General Safety:

- Provide an **integrated approach** based on
  - the vehicle,
  - the driver and
  - the road infrastructureas the most effective way of increasing road safety

# Roadmap Safety



# Safety Issues of relevance for UN/ECE

- GTR on **Electronic Stability Control**
- **Daytime running lights (UNECE Regulation 48)**
- GTR on **pedestrian protection**
- **Brake assist as part of pedestrian protection**
- **Sensor based Emergency Braking**

# CARS 21 –Environmental issues

- Continue reducing **NO<sub>x</sub>** and **particulate matter emissions**
  - **Euro 5/6** (cars and light duty vehicles) already adopted
  - Proposal for **Euro VI** (heavy duty) in 2007
- Continue reducing **CO<sub>2</sub> emissions** from cars on the basis of an **integrated approach** to reach the Community target of **120 g/km by 2012**

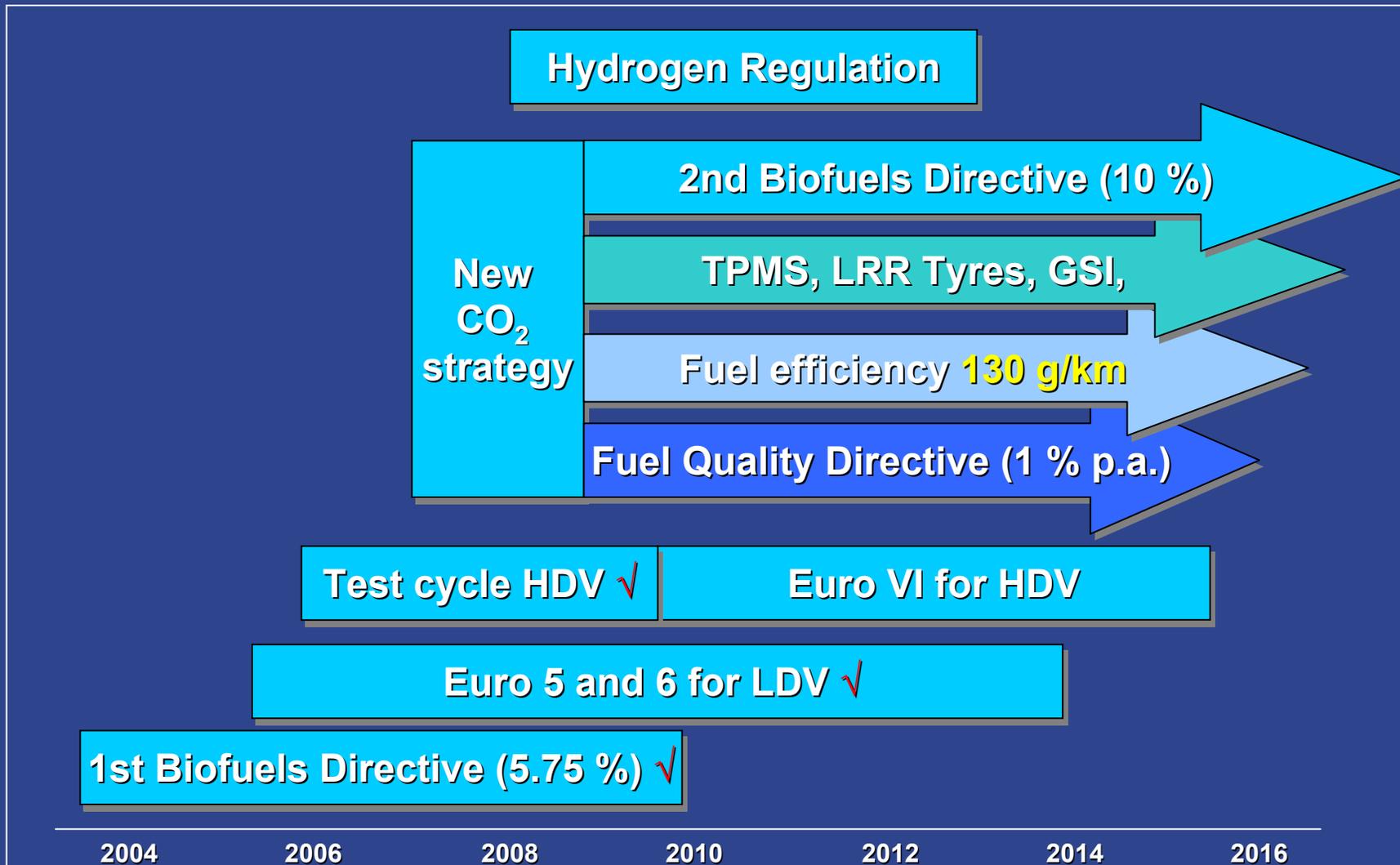
# CO<sub>2</sub> emissions from cars (1)

- **Measures to reduce CO<sub>2</sub> emissions:**
  - **Vehicle technology** improvements (engine, hybridisation, vehicle body etc.): 130 g/km
  - **Tyre pressure monitoring systems**
  - **Low rolling resistance tyres**
  - **Gear shift indicators**
  - **Mandatory fuel efficiency targets for light-commercial vehicles**

# CO<sub>2</sub> emissions from cars (2)

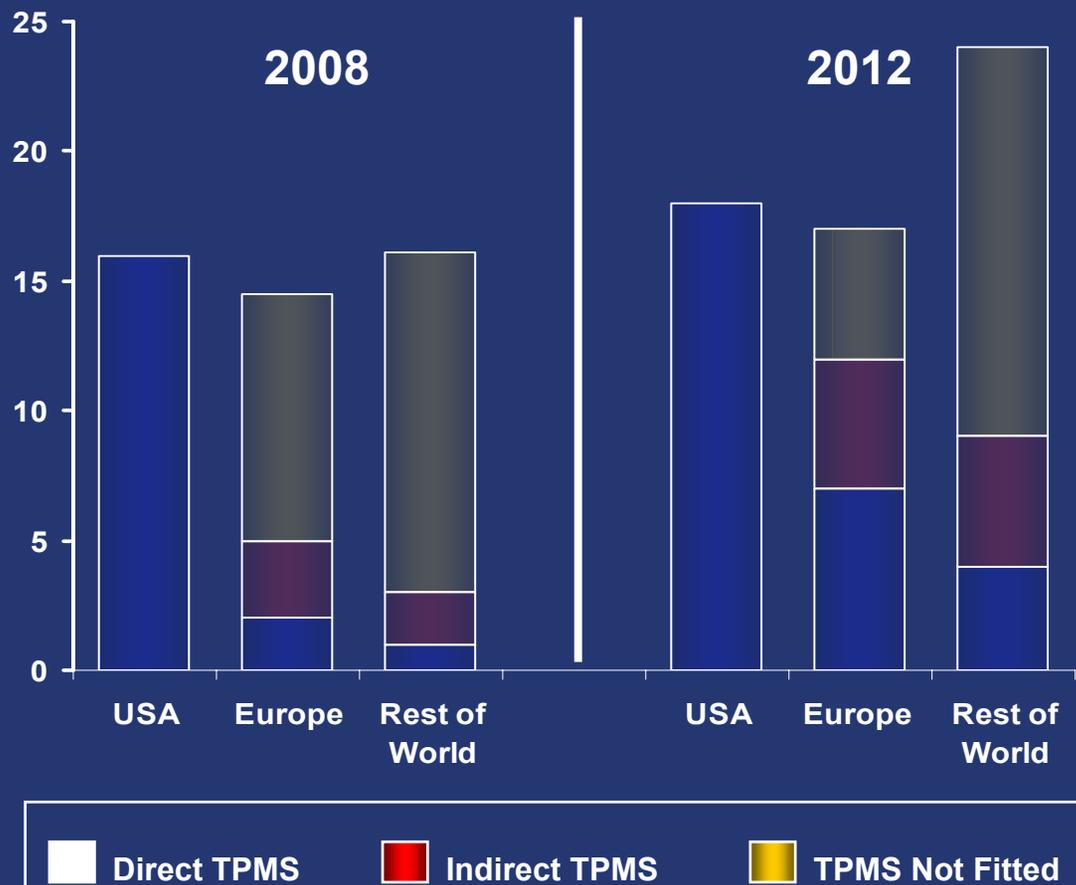
- **Increased involvement of other stakeholders:**
  - **Fuel suppliers** (low carbon content fuels – e.g. biofuels)
  - **Member States** (taxation, **fiscal incentives**, traffic management, infrastructure etc.)
  - **Consumer awareness** (e.g. amending the **Labelling Directive**)
  - **Drivers' behaviour** (e.g. eco-driving)
- **Accountability and 'monitorability' are needed to make a quantified contribution**

# Roadmap Emissions



# Market penetration – direct vs indirect

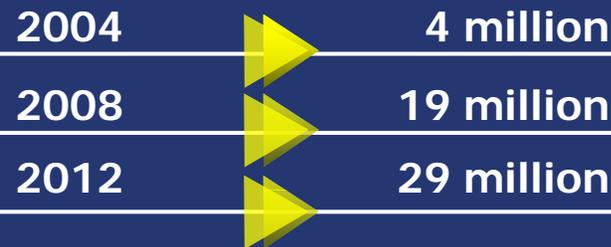
## Tire Pressure Monitoring Vehicle Penetration



## Direct TPMS Penetration Level

	2008	2012
USA	100%	100%
Europe	14%	40%
ROW	6%	17%
<b>Total</b>	<b>39%</b>	<b>47%</b>

## Vehicles Fitted With Direct TPMS



From: Schrader Electronics

# Environmental Issues of relevance to UNECE

- **Tyre pressure monitoring systems**  
(update of runflat warning systems needed)
- **Low rolling resistance tyres**
- **GTR on Hydrogen**
- **Update of GTR on heavy duty vehicles testing procedure**

# Conclusions

- **Implementation of the CARS 21 Strategy by a combination of**
  - **EU-Regulations and**
  - **UNECE-Regulations**
- **Midterm review in 2009** to monitor progress made
- **Reference documents under**

<http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21.htm>

Thank  
you



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THANK YOU  
for your attention

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