An Introduction to the New Vehicle Safety Regulation

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Current situation

- Over 50 base Directives covering vehicle safety and environmental issues
- Plus over 100 amending Directives
- Some Directives over 35 years old
- Many duplicate UNECE Regulations
Proposed Regulatory Structure

Motor Vehicles (4 wheels++)

Framework Directive

Hydrogen

Pedestrian Protection

General Vehicle Safety

Euro VI Regulation

Euro 5 & 6 Regulation

Recyclability Directive

MAC Dir.

2 & 3 wheelers

Basic Regulation

Tractors

Basic Regulation
New Regulation on General Vehicle Safety

Proposal by the Commission in May 2008 will cover the following areas:

- Regulatory Simplification
- Advanced Vehicle Safety
- New Requirements on Tyres.
Regulatory Simplification

- In line with the recommendations of the *Cars 21* report
- Will involve the repeal of 50 base Directives and over 100 amending Directives
- To promote wider harmonisation, reference will be made to international regulations (UNECE) wherever possible.
Advanced Vehicle Safety

Regulation will include the following technologies:

- **Electronic Stability Control** (mandatory on all new vehicles)
- **Advanced Emergency Braking and Lane Departure Warning** (mandatory initially on heavy duty vehicles)
Electronic Stability Control
Electronic Stability Control

- Technical Standards based on UNECE Regulation 13 or UNECE Regulation 13H (adopting the GTR requirements)
- Will apply to new vehicle types from 2012
- Will apply to all new cars from 2014 (later for some heavy vehicles)
Heavy Vehicle Safety

• Advanced Emergency Braking and Lane Departure Warning mandatory for new types of heavy duty vehicles from 2013, existing types from 2015

• Optional on light duty vehicles

• Technical standards to be agreed through UNECE route.
Advanced Emergency Braking System

• Radar or Laser systems detect if vehicle in front is too close
• Brakes may be applied automatically if necessary
Lane Departure Warning

- System warns when driver is crossing road markings
- Can also warn when there is a vehicle in the adjoining lane.
Various Safety Features - Projected Savings for EU 27

Measures covered by this document

Measures covered by other existing or future proposals

Avoidable Fatalities

Avoidable Severe Injuries

Automated Emergency Brake
Lane Departure Warning
ESC on Cars
ESC on Trucks
TPMS
Seat Belt Reminders
ABS on Motorbikes II
Pedestrian Protection
Conspicuity Marking
e-call Pan-European
DRL

18/06/2008
New Requirements on Tyres

- Reduction in noise limits - by average of 3 db (A)
- New limits on rolling resistance (for reduction of CO$_2$)
- Type Pressure Monitoring Systems to be mandatory (for CO$_2$ reduction and safety)
- New wet grip requirements
Tyre noise proposals

- Tyre noise standards originally introduced in 2001
- Proposed new requirements propose further reductions of up to 4 dB(A)
- Requirements will apply to new tyre types from 2012 and all new tyres from 2016
## Tyre noise proposals

<table>
<thead>
<tr>
<th>Tyre class</th>
<th>Limit value db(A)</th>
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<tbody>
<tr>
<td></td>
<td>old</td>
<td>new</td>
<td>difference</td>
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<tr>
<td>C1A (≤ 185mm)</td>
<td>72</td>
<td>70</td>
<td>2</td>
</tr>
<tr>
<td>C1B (185-215mm)</td>
<td>73</td>
<td>71</td>
<td>2</td>
</tr>
<tr>
<td>C1C (215-245mm)</td>
<td>74</td>
<td>71</td>
<td>3</td>
</tr>
<tr>
<td>C1D (245-275mm)</td>
<td>75</td>
<td>72</td>
<td>3</td>
</tr>
<tr>
<td>C1E (&gt; 275mm)</td>
<td>76</td>
<td>74</td>
<td>2</td>
</tr>
<tr>
<td>C2</td>
<td>75</td>
<td>72</td>
<td>3</td>
</tr>
<tr>
<td>C2 traction</td>
<td>77</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>C3</td>
<td>76</td>
<td>73</td>
<td>3</td>
</tr>
<tr>
<td>C3 traction</td>
<td>78</td>
<td>75</td>
<td>3</td>
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</table>
Tyre Rolling Resistance

• New limits on rolling resistance introduced for the first time
• Limits to apply in two stages, from 2012 and 2016
• Technical test procedures to be included in UNECE Regulations
• CO2 reduction Contribution of around 3.9 g/km for typical car
<table>
<thead>
<tr>
<th>Tyre category</th>
<th>Max. Rolling Resistance (Kg/Tonne)</th>
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<tbody>
<tr>
<td></td>
<td>Stage 1</td>
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<td>C1</td>
<td>12</td>
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<tr>
<td>C2</td>
<td>10.5</td>
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Tyre Pressure monitoring systems

- TPMS alert the driver when the tyres are at a low pressure, affecting safety and fuel consumption
- TPMS will be required on new car types from 2012 and existing types from 2014.
- We intend to agree technical standards via the UNECE
- CO2 reduction contribution of around 3.2 g/km for a typical car
Tyre wet grip requirements

- Introduced to ensure that safety standards are maintained
- Based on the requirements in UNECE Regulation 117
- Will apply to new car tyre types from 2012 and existing types from 2014
- Will be extended to tyres for larger vehicles when standards have been finalised
THANK YOU for your attention

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