Commission Proposal on the General Safety of Motor Vehicles

Automotive Unit- F1

Overview

• Current Situation
• General Safety Proposal
• Approach and Implementation
• Next steps
Current Situation

• Some Directives over 35 years old
• Around 50 base Directives covering vehicle safety issues
• Many duplicate UNECE Regulations – others lag behind
Proposed Regulatory Structure

Motor Vehicles (4 wheels+)

Framework Directive

- HYDROGEN IMP. REG.
- PEDESTRIAN PROTECTION IMP. REG.
- GENERAL VEHICLE SAFETY IMP. REG.
- EURO VI REGULATION IMP. REG.
- EURO 5 & 6 REGULATION IMP. REG.
- RECYCLABILITY DIRECTIVE IMP. REG.
- MAC DIRECTIVE IMP. REG.

2 & 3 Wheelers

- Basic Regulation IMP. REG.

Tractors

- Basic Regulation IMP. REG.

Proposed Regulation on General Vehicle Safety

Proposal provides:

• Regulatory Simplification

• Advanced Vehicle Safety

• New Requirements on Tyres

- Impact Assessment completed
IMPACT ASSESSMENT SUMMARY

• Optional and Mandatory requirements considered

• Mandatory requirements only introduced where there was a strong cost-benefit case & market forces alone were unlikely to deliver

• Combination of mandatory and market mechanism used for rolling resistance
IMPACT ASSESSMENT SUMMARY

• Mandatory measures can save around 5,000 lives and 35,000 serious injuries per year across EU27

• Tyre measures can contribute up to 7g/km towards CO₂ reduction targets

• Average vehicle purchase cost increase from all mandatory measures around 200 Euro for cars and 2500 Euro for heavy vehicles

• Running costs for motorists likely to be reduced due to improved fuel economy.
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.
• replacement of Directives by Regulations to simplify the process of adoption of new and amended proposals by Member States.
Advanced Vehicle Safety

Regulation will include the following issues:

- Electronic Stability Control
- Heavy Vehicle Safety
- New requirements on Tyres
Electronic Stability Control

- Apply to new vehicle types from 2012
- Technical Standards based on UNECE Regulation 13 or UNECE Regulation 13H (adopting the GTR requirements)
- Will apply to all new cars from 2014 (later for some heavy vehicles)
Electronic Stability Control - why mandatory?

- Wide variation of fitment of ESC to cars between Member States
- Strong evidence to support casualty reduction potential – therefore should not be optional.
- Fitment rate to heavy vehicles is even lower than for cars
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

• Analysis of potential accident savings for various classes of vehicle and various levels of system capability

• Positive benefit/cost ratio for heavy vehicles

• Impact assessment concluded that systems should be mandatory only on heavy vehicles
Lane Departure Warning

- Indications of good cost/benefit ratio
- Further work required to explore costs and benefits in greater detail
- Impact assessment concluded that systems should initially be mandated for heavy vehicles

New Requirements on Tyres

• Reduction in noise limits
  - by average of 4 db (A)

• New limits on rolling resistance (for reduction of CO₂)

• Type Pressure Monitoring Systems to be mandatory (for CO₂ 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 5 dB(A)

• Requirements will apply to new tyre types from 2012 and all new tyres from 2016
Tyre Noise Proposals

• Noise proposals based on study by FEHRL (including TRL, TUV, Bast, VTI)

• Estimated that 30-50% of tyres can meet proposed standards already

• Greater uncertainly over C2 and C3 tyres – values adjusted to reflect this uncertainty

• Further research required in this area.
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
- \( \text{CO}_2 \) reduction contribution of around 3.9 g/km for typical car
Tyre Rolling Resistance

• Proposed values based on ‘state of art’ in 2004.

• 56% of summer tyres in 2004 could meet proposed Phase 1 requirements; 16% could meet proposed phase 2 requirements.

• 26% of winter tyres in 2004 could meet proposed Phase 1 requirements; 3% could meet proposed phase 2 requirements.
Tyre Rolling Resistance

- Proposal also to apply to after-market tyres.
- Further encouragement to improve rolling resistance could be achieved by labelling scheme
- Subject of a separate Commission initiative.

Tyre Pressure monitoring systems

• TPMS alerts the driver when the tyres are at low pressure, affecting safety and fuel consumption

• TPMS will be required on new car types from 2012 and existing types from 2014.

• Technical standards to be agreed via the UNECE

• CO₂ reduction contribution of around 3.2 g/km for a typical car (based on TNO estimate of 2.5% drop in fuel consumption)
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
Proposal Approach

• Contains the technical areas which will be covered by the Regulation.

• Specific requirements will be covered either through UNECE Regulations or Implementing Regulations agreed through the committee procedure.
**Implementation**

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<thead>
<tr>
<th>Item</th>
<th>new types</th>
<th>existing types</th>
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<td>Advanced safety items</td>
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<td>Rolling resistance - P1)</td>
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<td>Rolling resistance - P2)</td>
<td>2016</td>
<td>2018 (2020 for C3 tyres)</td>
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<td>Rolling noise</td>
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<td>2016</td>
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Further Steps to be Taken

Work with the UNECE in the following areas

- Standards for ESC (almost completed)
- Standards for TPMS (ongoing)
- Test requirements for rolling resistance (under discussion)
- New Regulation(s) on AEBS and LDW (to be started)
THANK YOU for your attention