New EU Regulation for the approval of 2-3 wheel vehicles and UNECE Regulations on sound level

Working party on Noise (GRB) 55th meeting

7 - 9 February 2012
Introduction

• Proposal for a Regulation of market surveillance and approval of L-category vehicles (codecision act) adopted by Commission on 04 October 2010.

• Currently scrutinized by the legislators (Council of ministers and EU Parliament). Anticipated EU parliament vote: 19 April 2012.
Introduction

- Scope of the proposal regarding **Light-category vehicles (1)**
  - 2-wheel vehicles (powered two wheel vehicles)

<table>
<thead>
<tr>
<th>Category &amp; Category Name</th>
<th>Sub category &amp; Sub category name</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1e, light two-wheel vehicle</td>
<td>L1Ae powered cycle</td>
<td>![Example Image]</td>
</tr>
<tr>
<td></td>
<td>L1Be Moped</td>
<td>![Example Image]</td>
</tr>
<tr>
<td>L2e Three-wheel moped</td>
<td></td>
<td>![Example Image]</td>
</tr>
<tr>
<td>L3e, motorcycle</td>
<td>A1, A2, A3 ≤ 130 km/h ≥ 130 km/h</td>
<td>![Example Image]</td>
</tr>
<tr>
<td>L4e, motorcycle with side car</td>
<td></td>
<td>![Example Image]</td>
</tr>
</tbody>
</table>
## Introduction

- Scope of the proposal regarding **Light-category vehicles** (2)
  - 3-wheel vehicles (tricycles)

<table>
<thead>
<tr>
<th>Category &amp; Category Name</th>
<th>Sub category &amp; Sub category name</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>L5e, tricycles</td>
<td>L5Ae Tricycles</td>
<td><img src="image" alt="L5Ae Tricycle" /></td>
</tr>
<tr>
<td></td>
<td>L5Be Commercial tricycles</td>
<td><img src="image" alt="L5Be Commercial Tricycle" /></td>
</tr>
</tbody>
</table>
Introduction

- Scope of the proposal regarding Light-category vehicles (3)
  - 4-wheel vehicles (quadricycles)

<table>
<thead>
<tr>
<th>Category &amp; Category Name</th>
<th>Sub category &amp; Sub category name</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>L6e, Light quadricycle</td>
<td>L6Ae Light on-road quad</td>
<td><img src="image" alt="L6Ae" /></td>
</tr>
<tr>
<td></td>
<td>L6Be Light mini-car</td>
<td><img src="image" alt="L6Be" /></td>
</tr>
<tr>
<td>L7e, Heavy quadricycle</td>
<td>L7Ae Heavy on-road quad</td>
<td><img src="image" alt="L7Ae" /></td>
</tr>
<tr>
<td></td>
<td>L7Be Heavy mini-car</td>
<td><img src="image" alt="L7Be" /></td>
</tr>
</tbody>
</table>
Introduction

- Vehicles not in the scope of the proposal (4)
  - maximum design speed not exceeding 6 km/h;
  - exclusively intended for use by the physically handicapped;
  - exclusively intended for pedestrian control;
  - exclusively intended for use in competition under on-road or off-road conditions;
  - exclusively intended for use by the armed forces, law enforcement agencies, civil defence services, fire brigades or public-works bodies;
  - agricultural or forestry vehicles, machines, motor vehicles
  - primarily intended for off-road use and designed to travel on unpaved surfaces;
  - light powered cycles with pedal assistance;
  - self-balancing machines;
  - vehicles not equipped with at least one seating position.
Identified concerns and objectives

- Identified concerns
  - the complexity of the current legal framework;
  - the level of emissions and its increasing share in total road transport emissions, which are decreasing overall;
  - safety aspects related to type-approval requirements for vehicles;
  - the lack of a legal framework for vehicles fitted with new technologies;
  - the entry of products into the EU market which do not comply with the current type-approval requirements regarding functional vehicle safety and/or environmental protection.

- Main Objective
  - Efficiently and effectively address the above listed issues.
Introduction – Proposed legal structure

• Anticipated structure regulation on approval of L-category vehicles.

• **Co-decision** act (legislators) anticipated adoption 2012, pending first reading agreement

• **Delegated** acts (Commission) anticipated adoption 2012, pending first reading agreement of codecision act
  - Regulation on environmental and propulsion performance requirements (**REPPR**);
  - Regulation on vehicle functional safety requirements (**RVFSR**);
  - Regulation on vehicle construction requirements (**RVCR**).

• **Implementing** act (Commission) (anticipated adoption 2012)
  - Regulation on administrative requirements (**RAR**)

• This whole legal package listed above is proposed to become first applicable as of 01 January 2014.
Examples of features addressed by this Regulation

• The proposal for the codecision Regulation includes among others the following features:
  ▪ Market surveillance;
  ▪ Obligatory fitting of Advanced Brake Systems;
  ▪ Abandon 74 kW power restriction;
  ▪ Anti-tampering measures;
  ▪ Re-categorisation;
  ▪ Access to repair and maintenance information;
  ▪ New emission steps Euro 3, Euro 4, Euro 5 (and Euro 6 for L3e motorcycles only);
  ▪ All L-category vehicle categories using one single emission laboratory test cycle (revised WMTC);
  ▪ Mandatory introduction of on-board diagnostic stage I;
  ▪ Mandatory fitting of Automatic Headlamp On feature.
# Environmental measures – overview of requirements

- Annex V on environmental requirements of the proposed codecision act

<table>
<thead>
<tr>
<th>Test type</th>
<th>Test description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Tailpipe emissions after cold start</td>
</tr>
<tr>
<td>II</td>
<td>Environmental requirements related to road worthiness</td>
</tr>
<tr>
<td>III</td>
<td>Emissions of crankcase gases</td>
</tr>
<tr>
<td>IV</td>
<td>Evaporative emissions</td>
</tr>
<tr>
<td>V</td>
<td>Durability of pollution control devices</td>
</tr>
<tr>
<td>VI</td>
<td>Low-temperature test (not applicable)</td>
</tr>
<tr>
<td>VII</td>
<td>CO₂ emissions / fuel consumption</td>
</tr>
<tr>
<td>VIII</td>
<td>On-board diagnostics (OBD)</td>
</tr>
<tr>
<td>IX</td>
<td>Sound level</td>
</tr>
<tr>
<td>X</td>
<td>Electromagnetic compatibility</td>
</tr>
</tbody>
</table>
## Noise level: Calendar

3 steps:

1) carry-over current requirements Directive 97/24/EC, chapter IX (2014)
2) UNECE test method and « equivalent limits » (2017)
3) UNECE test method and new limits (2020) – New from the EU legislators necessary

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>(Sub-)category</th>
<th>New types of vehicles</th>
<th>New types of vehicles</th>
<th>Existing types of vehicles</th>
<th>Last date of Registration of compliant vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9</td>
<td>Test type IX, Sound level(^3)</td>
<td>L1e - L7e</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.9.1</td>
<td>Sound level test procedure and limit values(^6), Annex VI (D) to codecision Regulation;</td>
<td>L1e - L7e</td>
<td>-</td>
<td>[01 Jan '14]</td>
<td>[01 Jan '15]</td>
<td>[31 Dec '20]</td>
</tr>
<tr>
<td>1.9.2</td>
<td>UNECE Regulations No.9, 41, 63 and limits of Annex VI (D) to this Regulation;</td>
<td>L1e - L7e</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9.3</td>
<td>UNECE Regulations No.9, 41, 63 and associated new limit values proposed by the Commission under regulatory procedure.</td>
<td>L1e - L7e</td>
<td>[01 Jan '18]</td>
<td>[01 Jan '20]</td>
<td>[01 Jan '21]</td>
<td></td>
</tr>
</tbody>
</table>

NB: Category L3e motorcycles always one Euro step ahead;
Environmental measures - Sound requirements, Annex VI (D) of the proposed codecision act

- Sound requirements, issues (1)
  - Progress in completion of UNECE regulation 41. EU ready to start accession process.
  - Carry over UNECE Regulation 41 requirements into UNECE Regulations 9 and 63 (update).
  - Acceding EU to Regulation 9, 41 and 63 and making obligatory through Annex VI (D) of the codecision act.
  - Progressive replacement of EU proprietary sound requirements by UNECE regulations between 2014 and 2020.
Environmental measures - Sound requirements, Annex VI (D) of the proposed codecision act

- Sound requirements, issues (2)

- Major noise reduction anticipated from more severe measures on powertrain and noise abatement tampering prevention methods for all L-category vehicles.

- Electric hybrid and full electric L-category vehicles are proposed to be in the scope of Test IX, sound level in order to cover minimum sound requirements (to be developed and derived from car minimum noise requirements ?).
More information on L-category vehicle proposal?

Codecision proposal with impact assessment:

THANK YOU FOR YOUR ATTENTION!

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