

Public consultation on a proposal for a Framework Regulation of the European Parliament and of the Council on type-approval of two- and three wheel motor vehicles and quadricycles.

Consultation document

1. Introduction

Directive 2002/24/EC¹ relating to the type-approval of two- or three-wheel motor vehicles ("two and three-wheelers") and its daughter directives have established a harmonized framework for the European type-approval vehicle of L Category: mopeds, motorcycles, tricycles and quadricycles. This framework became mandatory from 9 May 2003 for all L vehicles sold in the European Union.

Since then, the legal framework for motor vehicles has evolved a lot. A new framework Directive² on cars, trucks, busses and trailers has in particular improved the administrative provisions applying to the type-approval procedure for cars and commercial vehicles. Moreover, the CARS 21³ initiative has promoted an exercise of simplification of the legislation on type-approval of cars and commercial vehicles. In principle, these improvements could be extended to two- and three-wheelers.

Furthermore, in its 2001 Transport White Paper⁴, the Commission proposed the ambitious goal to save 25,000 lives annually on European roads by the target date of 2010. Two- and three-wheelers show generally worse road accident data than other vehicles. The safety of these vehicles needs therefore to be addressed to contribute improving road safety in Europe.

Finally, two- and three-wheelers are contributors to gaseous emissions. Directive 2002/51/EC⁵ has introduced Euro 3 step from 1 January 2007 for all types of motorcycles. After the entry into force of additional measures on passenger cars and vans (Euro 5/6) and on heavy duty vehicles (Euro VI), the share of two- and three-wheelers in total emissions should increase. It is therefore considered that the emissions from these vehicles as well should be addressed.

In this context, the Commission wishes to prepare a revision of the legislation on the type-approval of two- and three-wheelers as well as new measures on safety and pollutant emissions to be proposed in mid-2009. As part of the consultation process, this paper aims at gathering information and views from all the interested stakeholders on the concrete elements proposed for the future legislative framework on two and three-wheelers envisaged by the Commission services.

¹ OJ L 124, 9.5.2002, p. 1

² Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles. OJ L 263, 9.10.2007, p. 1

³ COM/2007/0022 final

⁴ http://ec.europa.eu/transport/white_paper/documents/doc/lb_com_2001_0370_en.pdf

⁵ OJ L252, 20.9.2002, p.20

2. Objectives

The proposal would have three objectives: simplification of the legislation (Better Regulation), new emission standards, and new safety measures.

The simplification pillar consists of replacing the framework Directive and its separate Directives by a single framework Regulation. The proposal would repeal 14 Directives.

At the same time, new emission and safety measures would be introduced in order to keep the legislation up to date with the latest technology developments. Therefore, it is envisaged to introduce:

- a) A new package of measures on emissions including durability, measurement of CO₂ emissions, evaporative emissions, as well as new emission limits for motorcycles, mopeds and quadricycles
- b) New safety measures to reduce road casualties, such as advanced braking systems, anti-tampering measures and specific requirements on quads.

3. Simplification

As an overall legislative approach, it is suggested to use Regulations instead of Directives, a "split level approach", a decrease of the number of applicable texts and an increasing use of international regulations. The 14 Directives on two- and three- wheelers will be replaced by a new set of legislation. A single basic EC regulation laying down the fundamental provisions (similar to the existing directive, and emission and noise limits) will be adopted by the co-legislators whereas the technical specifications (similar to the existing specific Directives) implementing the fundamental provisions will be adopted by comitology (so called "split level approach"). This procedure will enable the co-legislators to focus on the main political objectives of the proposal (i.e. emission limits), whereas the technical issues will be dealt at the level of the technical experts. The use of regulations will avoid transpositions by Member States and associated lead time. The advantage for the different stakeholders (manufacturers, NGOs, Commission, co-legislators) will be a better legal certainty, a quicker update of the legislation and a limited number of texts to follow.

The EU has acceded to 106 Regulations of the United Nation Economic Commission for Europe (UNECE) under the 1958 Agreement⁶. The CARS 21 group⁷ has shown a great interest in replacing the technical requirements of EC Directives by equivalent UNECE Regulations. This could also be applied to two- and three-wheelers in some cases. UNECE Regulations are widely accepted in countries inside and outside the EU and referring to UNECE Regulations will allow

⁶ 97/836/EC: Council Decision of 27 November 1997 with a view to accession by the European Community to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions ('Revised 1958 Agreement'). OJ L 346, 17.12.1997, p. 78.

⁷ COM/2007/0022 final

manufacturers to develop one single design which will cover all markets and thus decrease type-approval cost/burden.

Finally, in order to keep consistency in the EC type-approval procedures, it seems appropriate to take into account the work done to recast the framework Directive for motor vehicles, 70/156/EEC (now 2007/46/EC⁸) and introduce some of the measures of the latter that are necessary for two- and three-wheelers.

Question 1: What do you think of the use of one basic EU Regulation and the split level approach for the revision of the legislation on two- and three-wheelers? Why?

Question 2: Do you agree with the approach to increase the use of references to UNECE Regulations? Why?

Question 3: Which administrative measures introduced for motor vehicles (Directive 2007/46/EC) should not be included in the legislation on two- and three-wheelers? Why?

4. Emission standards

Directive 97/24/EC⁹ is one of the separate Directives under the type-approval procedure laid down by Directive 2002/24/EC. It introduced Euro 1 (from 1999) and Euro 2 (from 2002) for mopeds and light quadricycles as well as Euro 1 (From 1999) for motorcycles, tricycles and quadricycles. This Directive was amended by Directive 2002/51/EC¹⁰ in order to introduce Euro 2 standards from 2003 for all motorcycles, quadricycles and tricycles and a Euro 3 step from 1 January 2007 for all motorcycles.

As suggested in Directive 2002/51/EC, the Commission granted a study to assess a number of possible additional measures concerning two- and three-wheelers. The study carried out by the Laboratory of applied thermodynamics of University of Thessaloniki (LAT) concluded in 2004 that some measures proposed by Directive 2002/51/EC could have a positive effect on Hydrocarbons (HC) and Nitrogen Oxides (NOx). The LAT report is available on our website: http://ec.europa.eu/enterprise/automotive/projects/report_motorcycle_emissions.pdf

The possible measures were then discussed in a special the motor vehicle emission working group (MVEG), involving NGOs and Member States. Based on the discussion in the MVEG, the Commission expressed its view on possible future legislation on emissions from two- and three wheelers in the following document:

http://ec.europa.eu/enterprise/automotive/mveg_meetings/meeting97/status_report_emissions.pdf

⁸ Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles. OJ L 263, 9.10.2007, p. 1

⁹ OJ L 226, 18.8.1997, p. 1

¹⁰ OJ L252, 20.9.2002, p.20

The new measures considered by the Commission as the most efficient concern the setting of new emission limits, together with additional measures: the introduction of durability limits, CO₂ measurement, fuel consumption measurement, evaporative emissions limits, a new test procedure for mopeds, new limits for quadricycles, and the use of the Worldwide Motorcycle test cycle (WMTC) of the Global Technical Regulation n°2 of the United Nations (GTR N°2).

However, the study carried out had also concluded that due to the small fleet, the benefit of overall emissions compared to measures applied to cars and trucks is much lower for a higher cost/ effectiveness ratio. This is why the Commission services focused first on the development of new emission standards for light duty vehicles (Euro 5/6) and on heavy duty vehicles (Euro VI).

Now the work has been done for light duty and heavy duty vehicles, the share of emissions from two- and three-wheelers in overall emissions are likely to increase in the future. Consequently, the Commission is currently assessing whether the strategy for new measures previously proposed for two- and three-wheelers is still valid. Furthermore, it seems that motorcycle limits equivalent to Euro 5 car limits would be now technologically feasible. Therefore, the Commission is also assessing whether such limits would be appropriate for motorcycles together with the Worldwide Motorcycle test cycle (WMTC).

Question 4: Do you support the introduction of new emission limits for motorcycles equivalent to Euro 5 limits for petrol cars? Why?

Question 5: Do you think that additional emission measures should be introduced in the legislation? Why? What is your opinion on the introduction of additional measures such as CO₂ measurement, fuel consumption, etc. ?

5. New safety measures

5.1 Advanced braking system for motorcycles (i.e. ABS/coupled braking devices)

It is generally recognized that advanced braking systems (Anti-lock/coupling devices) help the driver when he brakes and prevents the vehicle from sliding when braking. In the framework of the road safety charter¹¹, the European motorcycle industry has committed that the majority of street models available in 2010 will be equipped with an advanced braking system. In 2008, 35 % of the street models available in Europe are standard or optionally equipped with an advanced braking system.

Several studies show that mandating ABS on a large range of motorcycles would have a positive effect on the number of accidents. The Commission is therefore currently assessing the possibility of mandating such systems and/or other technologies such as coupled braking on all motorcycles and the effect of such legislation

¹¹ <http://www.paueducation.com/charter/index.php?lng=en>

Question 6: What is your view on the mandatory fitting of ABS on all motorcycles? Why?

Question 7: In your opinion, are there other/supplementary solutions better suited for certain categories (i.e. coupled braking, stability control systems, etc.) that would produce the same/better effect at better costs?

5.2 Anti-tampering measures for mopeds, motorcycles, tricycles and quadricycles

Small motorcycles (<125cc) and mopeds have to comply with the requirements of Chapter 7 of Directive 97/24/EC relating to anti-tampering. These provisions are intended to prevent that the vehicle be modified to increase its maximum speed/power.

A study was granted to Tüv Nord in order to assess the impact of this legislation. The study is available on the website:

http://ec.europa.eu/enterprise/automotive/projects/report_anti_tampering_devices.pdf .

The study proposes a range of new measures concerning anti-tampering. It proposes in particular to extend these requirements to other categories of vehicles.

These new measures were discussed in the special motorcycle working group of the Commission. During this meeting, another amendment to the Directive was suggested, in particular to take into account the latest technology development in petrol engine control. All the documents relating to this meeting are available on:

http://ec.europa.eu/enterprise/automotive/mcwg_meetings/12-07-2005/index.htm.

All these possible measures are currently being assessed by the European Commission and should form the basis for the Commission proposal.

Question 8: What do you think about the additional measures proposed by the TÜV study and the one proposed in the Motorcycle working group mentioned above? Why?

Question 9: Do you think other solutions should be preferred? Which one?

5.3 74 kW power limit for motorcycles

Directive 95/1/EC on maximum design speed, maximum torque and maximum net engine power¹² has harmonized the national requirements in this field. However, it still allows Member States to refuse vehicles with a power above 74 kW. This derogation had been given with the view to increase safety. This creates a situation where a motorcycle above 74 kW type-approved in one country is refused in another one. This type of situation is not in line with the spirit of the internal market.

¹² OJ L 52, 8.3.1995, p. 1

On the other hand, it emerged from dedicated studies that the link between engine power and increase of safety cannot be demonstrated. Based on this, the Commission intends to propose an harmonisation of the EC legislation on that matter, that will therefore increase the coherence of the internal market, while at the same time propose concrete measures to increase safety.

Question 10: Do you think that the option given to Member States to limit the maximum power of motorcycles to 74 kW should be maintained? Why?

Question 11: Do you think that alternative criteria could be used (i.e. Power-to mass ratio, acceleration potential) to limit the accident occurrence of motorcycles?

5.4 mini-cars (L6 and L7 quadricycles)

Quadricycles (category L7) and light quadricycles (Category L6) are in the scope of Directive 2002/24/EC. They are defined as four-wheel vehicles with limited performances and mass. They were included in the scope of Directive 2002/24/EC because they could be assimilated to a moped with a bodywork (light quadricycles) or to a small motorcycle (< 125cc) with a bodywork (quadricycles). The market of such vehicles was and still is localized mainly in France, Italy and Spain. L6 are usually used in rural areas by old people who have never passed their driving licence whereas L7 are usually used as utility vehicles in small streets.

These vehicles generally look like mini-cars and could be as heavy as some passenger cars. The Commission regularly receives questions about the safety of such vehicles and would like to review the legislation in force.

Question 12: Given their localized markets, do you think that EU legislation on these vehicles is justified? Why?

Question 13: Do you think that these vehicles should have a stricter mass/passenger limitation to justify that they do not have to meet the safety requirements applying to cars or do you think that such vehicles should comply as much as possible with car requirements? Why?

5.5 Off-road quads (L7)

In recent years, another type of quadricycle has been EC type-approved, mainly in L7 category, even though the legislation was not made for that kind of vehicle: off-road quads. As their name suggests, these vehicles are mainly intended to be used off-road. Using them on the road may be dangerous because of their high acceleration and their high centre of gravity. The purpose of these vehicles is mainly leisure although some of them may be used for agricultural purposes. As

the EU legislation was not intended to cover such vehicles, the Commission would like to clarify the legal situation of such vehicles

Question 14: Should these vehicles be in the scope of type-approval whereas they are not designed to be used on the road?

Question 15: Do you think that at present the category in which these vehicles are type-approved is adapted to the design of such vehicles? Why?

Question 16: Should new specific requirements be added to improve the safety of such vehicles? Why?

6. Safety of hydrogen powered L category vehicles.

With more and more research being carried out on hydrogen vehicles, the Commission is assessing the possibility of creating new EC legislation on hydrogen powered L category vehicles.

Question 17: Do you think that EU legislation on hydrogen vehicles is needed? Why?

7. Overall impact of the legislation on the competitiveness of the EU industry.

Question 18: What do you think will be the impact of the range of measures that are outlined above on the competitiveness of the EU industry, and in particular SME's?

Question 19: What will be the impact of the measures on employment in the EU?

Question 20: Do you think that the measures proposed could have a significant impact on the final price of the vehicles? If yes, which ones?

8. Timetable

The Commission services intend to introduce a formal proposal to Council and Parliament by mid 2009. In the meantime, an Impact Assessment will be prepared covering all aspects of the proposed Regulation.