

## EUROPEAN COMMISSION ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Consumer goods Automotive industry

> Brussels, 25 November 2009 F1 D(2009)

## **REPORT**

Results of the public consultation on a proposal for a new Framework Regulation of the European Parliament and of the Council on type-approval of two-, three- and four-wheel motor vehicles, referred to as L-category vehicles.

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## **Executive Summary**

The European Commission is committed for the road transport sector, to half the number of road accident fatalities and heavily injured people by 2010 and as well to minimize the air pollution share of road transport. As part of the European Commission's modern industrial policy, the CARS 21 process, launched in 2005, aimed "to make recommendations for the short-, medium-, and long-term public policy and regulatory framework for the European automotive industry that enhances global competitiveness and employment while sustaining further progress in safety and environmental performance at a price affordable to the consumer."

The Commission decided therefore to apply these long-term goals also to L-category vehicles and to revise the current legal text in order to be aligned with these goals. Three main objectives were identified for the legislation on the type approval of these vehicles: simplification to lower the current high level of complexity, introduction of new emission measures to lower the relatively high share of L-category vehicle emissions in the road transport sector and additional safety measures in order to contribute to the ambitious safety goal.

L-category vehicles refer to a classification of a wide range of 2-,3- and 4 wheel vehicles like e.g. 2- & 3-wheel Mopeds, 2- and 3-wheel Motorcycles, Tricycles, All Terrain Vehicles/Quads and other quadricycles like mini-cars. All these different types of vehicles are currently type approved under the scope of EU framework directive 2002/24/EC and its fourteen associated implementing directives.

A number of potential policy options were developed in order to meet the overall objectives. Subsequently a public consultation paper was published on the Internet at the end of 2008. This questionnaire, including a brief explanation on every potential policy option and 20 associated open questions, was published on the Commission's website with a request to reply from Associations, Public Authorities and individual citizens. The replies to this consultation paper were collected, classified, analyzed and again published on the Commission's website. In total fifty-seven replies were received, as summarised in attachment #2 to this report.

Questions 1,2 and 3 were related to simplification. The majority of the respondents were in favour, but some respondents doubted whether this proposal was actually going to deliver the promised simplification or not. More transparency, better harmonization, and reduction of unnecessary administrative costs were anticipated by some respondents as justification to simplify the current legal requirements. Also using equivalent international UN ECE regulations to replace current EU directive requirements was perceived as positive by the majority of the respondents. A small number of critical voices feared that increasing the use of references to UNECE regulations would create a costly bureaucratic burden and generate a democratic gap from transferring future regulatory work from the EU process to this United Nations body.

Questions 4 and 5 were dedicated to questions regarding emission measures. About half of the total number of survey respondents representing associations, companies and public authorities (a total of forty-one), were supportive on the introduction of new emission limits equivalent to Euro 5 limits for petrol cars. An additional fifteen percent from the total number of this group of respondents were conditionally in favour, summarised as 'Relatively Favourable'. The conditions were mainly comprised of a sufficiently long lead time or a multi step approach for Industry to develop technology. Four respondents of this group of forty-one and the majority of the sixteen individual citizens were absolutely against the proposal fearing that more severe emission requirements would lead to a significant higher customer price. The majority of the respondents were also in favour of additional related emission measures like e.g. durability requirements, evaporative emission limits and CO<sub>2</sub> and fuel consumption measurements.

Questions 6 to 17 were related to safety measures. Question number 6 requested for the survey participant's view on mandatory fitting of Anti-lock Braking Systems (ABS) on Powered Two Wheelers (PTW) and potential alternative solutions. Explicitly being in favour or against mandatory fitting of ABS were approximately 30% each of the forty one respondents from the mix of associations, companies and public authorities. However, an additional seventeen percent of this group of respondents were conditionally in favour of mandatory fitting of ABS, referred to as 'Relatively Favourable'. Examples of these conditions were: mandatory fitting of ABS only for bigger PTWs, optional / voluntary fitting for small versions or other conditions like 'a robust Impact Assessment analysis should first demonstrate a positive cost-benefit ratio'. Question number 7 required the respondents view on other or supplementary solutions better suited for certain categories (i.e. coupled brake systems, stability control systems, etc.) that would produce the same/better effect than ABS at better (lower) cost. The top two of suggestions by the respondents:

'alternative advanced braking systems' (20%) and 'no alternative solution but ABS' (10%).

Questions 8 and 9 requested feedback on potential anti-tampering measures and asked for suggestions for alternative measures with respect to tampering prevention. A wide majority of survey participants (29%) that responded (52% of the 41 respondents) is opposed to additional anti-tampering measures. Frequently expressed opinion among the survey participants, including the ones from the individual citizens, is that there is a need for anti-tampering measures with respect to Mopeds (L1, L2), but that additional anti-tampering measures for motorcycles (L3, L4, L5) would be 'adverse to users' rights to make modifications to their motorcycles, providing these do not compromise their safety and impact on the environment.'. The top two responses to question number 9 if other solutions would be preferable: a shared first place for 'No additional solutions' and 'Periodical technical Inspections' (both 7% from the 41 survey participants from associations, companies and public authorities) and on number two 'Measures covering the electronic devices controlling the vehicle's maximum speed, the inter-changeability of components, the CVT components, the exhaust silencing system and marking (5% of total).

A high response rate (66% of total) was noted on questions 10 and 11 regarding power limitation and its alternatives. The absolute majority (51% of total 41 respondents from associations, companies and public authorities) were absolutely against power limitation, supported by nearly all individual citizens, owing to the opinion that a correlation between vehicle power and accident frequency was not scientifically proven. The top two of alternatives suggested by the respondents; a shared first place through education/training and power/mass ratio limitation (with each 12% of total), the second place for regular safety inspections with 5% of total.

Questions 12 and 13 were related to mini-cars (categories L6 and L7). 32% of the respondents were of the opinion that that EU legislation on these vehicles is justified, 7% was relatively favourable and 12% was not agreeing to this statement. The adversaries of this statement predominantly thought that these types of vehicles should be regulated under national legislation of the Member States. Regarding the question whether these vehicles should have designated safety requirements or comply with the same safety standards as passenger cars only 12% of the respondents were in favour for passenger car safety measures compliance. The majority would like to see measures that are specifically designated to these types of vehicles.

Questions 14 to 16 were related to quads. The majority of respondents is favourable (39% if the share 'relatively favourable' is included) to the question if these vehicles should be in the scope of type approval whereas they are not designed to be used on the road. Not a single respondent agreed with the statement that at present the category in which these vehicles are type approved is adapted to the design of such vehicles. The majority of the respondents would like to see new specific requirements be added to improve the safety of such vehicles.

The last question related to L-category vehicle safety, number 17, was related to the need if in the scope of the EU legislation hydrogen vehicles should be included. There was a slight majority in favour of EU legislative requirements regarding L-category vehicles fuelled with Hydrogen. Most of the stakeholders that are against this policy option argue that the technology is still in its early stage of development and that legislation may hinder innovation. The Motorcycle Industry and individual citizens were of the opinion that EU legislation on hydrogen Powered Two Wheelers is not needed for the very next future. Prototypes could be individually type-approved at national level or to be subject to an exemption of the current framework directive.

Questions 18 to 20 were related to the overall impact of new L-category vehicle legislation on the competitiveness of the EU industry. Only one third of the survey participants decided to reply to these questions and therefore is the statistical significance of these replies marginal. Question 18 requested for the view of the participants on the impact of measures related to the competitiveness of the EU industry, and in particular on the Small and Medium Enterprises (SMEs)? The reply of 22% of the respondents was positive, 10% anticipated a negative impact on the Industry. Question 19 asked for the view on the impact of employment within the EU, which 15% of the respondents thought this will be influenced negatively. Only 7% considered a positive effect and was optimistic for the future of e.g. suppliers owing to the development of new technologies and increased production of components and systems owing to higher demand from their customers. Finally on question 20 asking for the potential impact from new legislative requirements on the final customer price, the survey participants that responded were all of the same opinion, 34% of total thought there would be a negative impact of new measures on the end customer price.

### 1. INTRODUCTION

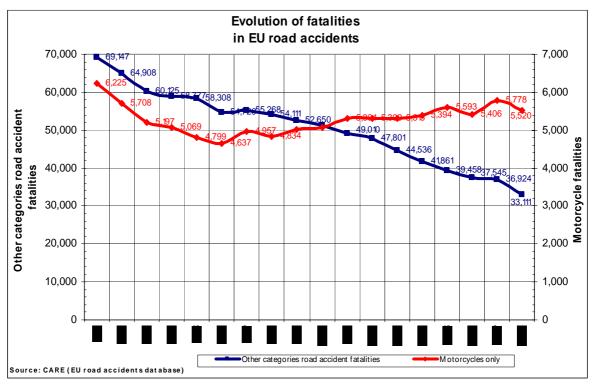
A public consultation was launched in December 2008 on the Commission's website and ended on 28 February 2009. Its purpose was to gather information and views from all relevant stakeholders, including public bodies, the general public, industry and business associations, on the specific elements to be assessed for the future legislative framework on two-, three- and four wheel vehicles of the L-category, envisaged by The Commission services.



**Figure 1:** Examples of L-category vehicles (source of pictures LAT report: Study on possible new measures concerning motorcycle emissions, November 2008)

These key issues concerning 2-, 3- and 4-wheel vehicles of the L-category can in general be attributed to:

- Complexity of the current legislation for L-category vehicles.
   The current legislative text consists of a framework directive and 14 associated implementing directives, all of which have been amended over time.
- · High level of emissions;
  - It is estimated that, quite apart from other aspects, the contribution of L-category vehicles to hydrocarbon emissions will rise to approximately 55% of total hydrocarbons emitted by all road transport vehicles in 2020, if no additional measures will be introduced. This is mainly owing to the significant reduction in emissions from other road transport categories like passenger cars and trucks.
- Road safety, high number of fatalities and seriously injured riders;
   in 2006, L-category vehicles accounted for 2% of distance travelled, but for 16% of road deaths. The fatality rate per million kilometres travelled is, on average, 18 times greater than for passenger cars. Furthermore, while other vehicle modes have shown significant decreases in fatalities and serious injuries over time, the figures for L-category vehicles have fallen much less, or have remained static.



**Figure 2:** Evaluation of total fatalities in road accidents in the European Union (left scale) and the number of fatalities for Motorcycles (right scale).

The public consultation was based on one questionnaire structured around three main objectives of the legislative proposal: simplification of the legislation (better regulation) to reduce the current complexity, addressing the high level of emissions and introducing safety measures to help meet the EU's safety goal by reducing the number of total fatalities in road accidents by 50% between 2001 and 2010. This summary covers the key issues and ideas raised in response to the consultation. Please refer to attachment #1, for more details the consultation paper with more detailed information and the questions.

## 2. RESPONDENTS AND ANALYSIS METHOD

In total fifty-seven respondents completed the survey and sent back their replies to the functional mailbox of the Commission services. Forty-one respondents replied on behalf of an association, a company or a public authority, while sixteen replies were received from individual citizens.

Please refer to attachment #2 for an overview of the Associations, Companies, Public Authorities and names of Citizens that responded to the internet consultation. The unfiltered responses from all respondents can be accessed directly on the Commission's website. In order to obtain a balanced and statistical representative result of the survey, the responses from associations, companies and public authorities were combined.

Although 16 individual citizens participated to the public consultation, in many cases the questions were left uncommented. The citizen replies that were applicable and which could be associated with the various questions have been summarised in a separate chapter. Individuals' e-mail and postal addresses have been removed in line with the pre-questionnaire privacy statement.

The next step was to classify the replies in an overview table per question. These classification results with its associated first analysis can be retrieved from attachment #3. The final results were interpreted and summarised in this report.

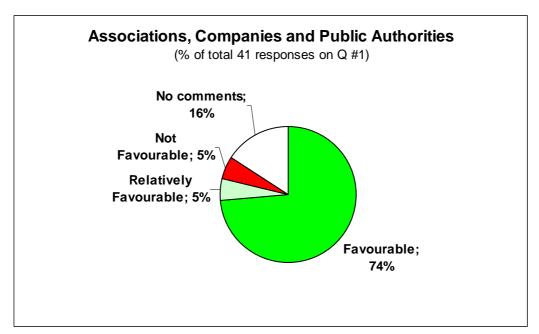
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<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/enterprise/automotive/directives/index.htm

## 2. SUMMARY OF RESPONSES FROM ASSOCIATIONS, COMPANIES AND PUBLIC AUTHORITIES

## 3.1. Simplification

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



**Figure 3:** Result of responses from Associations, Companies and Public Authorities on question # 1.

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

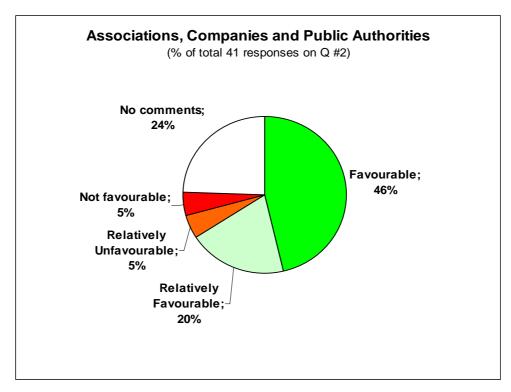
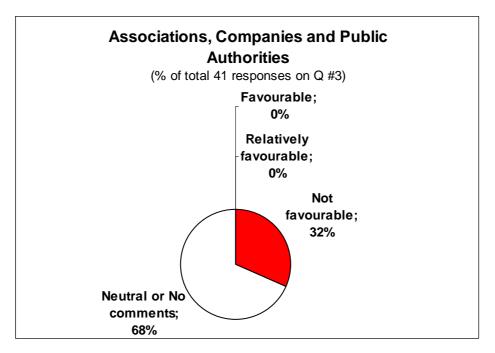


Figure 4: Result of responses from Associations, Companies and Public Authorities on question # 2.

**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?



**Figure 5:** Result of responses from Associations, Companies and Public Authorities on question # 3.

NB. Particular attention shall be paid to the interpretation of this last pie chart (double negation, owing to the  $\underline{not}$  in the question); the red area basically represents the respondents who would like the current administrative measures to be carried over or re-used in a new framework regulation.

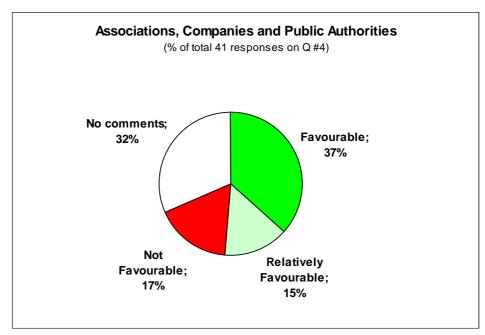
On the question of which administrative measures introduced for motor vehicles (Directive 2007/46/EC) should not be included in the legislation on two- and three-wheelers, 21 out of 41 respondents had no comments on that issue. Eight respondents support the introduction of all administrative measures introduced for motor vehicles (Directive 2007/46/EC) in the legislation on two- and three-wheelers. Four respondents emphasised the importance of allowing Member States to regulate individual type approvals at national level, while two called for the retention of a national regulation that allows modifications, rebuilding and amateur-built motorcycles to be maintained.

The great majority of respondents support the use of a single basic EU Regulation and the split-level approach for revising the legislation on L-category vehicles. Some of them think that simplification of the current legislation would lead to more transparency and greater harmonisation, on the one hand, and to reducing unnecessary administrative costs on the other. Moreover, some were of the view that a single approval should be regulated under the principle of subsidiarity within the framework. A minority of respondents, however, doubts whether this proposal will actually deliver the promised simplification.

Regarding the proposal to s the use of references to UNECE regulations, most respondents were broadly of the view that this would be a positive step forward towards international harmonisation. Nevertheless, five respondents expressed concern that it might create a costly bureaucratic burden and a democratic gap by transferring future regulatory work to the UNECE body.

## 3.2. New emission measures

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



**Figure 6:** Result of responses from Associations, Companies and Public Authorities on question # 4.

**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?

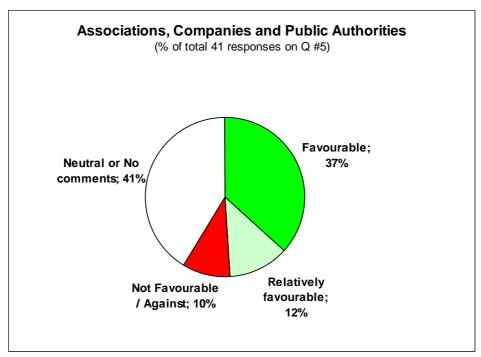


Figure 7: Result of responses from Associations, Companies and Public Authorities on question #5

There is a mixed picture with regard to the introduction of new emission limits for L-category vehicles equivalent to Euro 5 limits for petrol passenger cars. Twenty respondents generally supported favourably this proposal. Among them, 6 respondents were favourable provided that that a sufficiently long lead time or a multi step approach was given to industry to adapt to the new measures. Four respondents were absolutely against the proposal.

Eight out of eleven public authorities supported the introduction of additional emission measures. Fifteen out of forty-one associations were open to additional measures. Four respondents were not favourable. Twelve respondents did not comment on this question. Several business and industrial organisations suggested different measures including durability requirements, CO2 standards and fuel consumption measurement.

## 3.3. New safety measures

## 3.3.1. Mandatory fitting of Anti-lock Braking System (ABS)

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

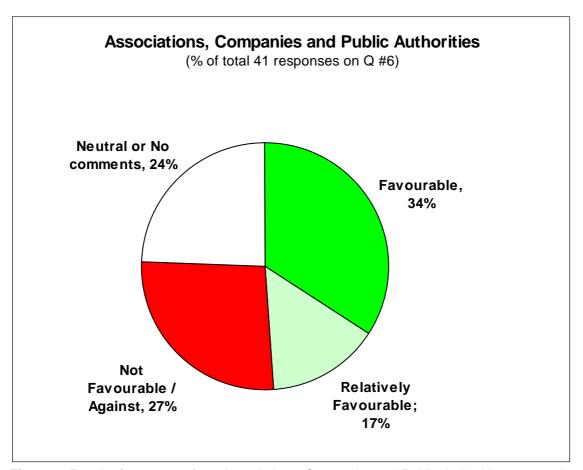


Figure 8: Result of responses from Associations, Companies and Public Authorities on question #6

Alternative solutions to mandatory fitting of Anti-lock Braking Systems (ABS)

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

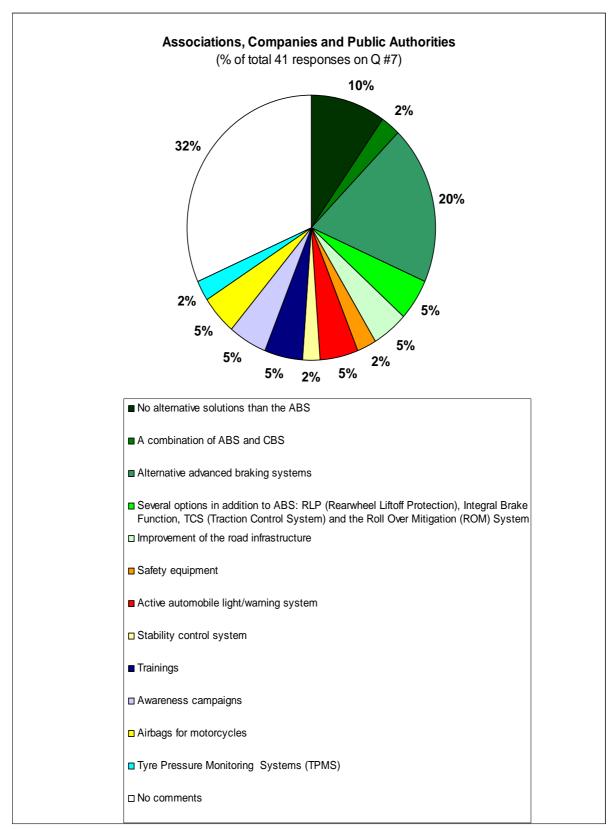


Figure 9: Result of responses from Associations, Companies and Public Authorities on question #7

In general the view on mandatory fitting of Anti-lock Braking Systems (ABS) was again mixed. Question number 6 was controversial in nature owing to the words 'mandatory fitting'. The shares of the forty-one respondents which were explicitly against or in favour of this potential policy option were about equal (29% against this option versus 32% in favour).

Frequently mentioned arguments against mandatory fitting of ABS:

- development of advanced braking systems should be left to the market, voluntary manufacturer commitment instead of introducing a legislative measure to oblige fitting of ABS on motorcycles;
- mandatory fitting of ABS hinders innovation;
- adds cost during the purchasing process and during maintenance;

A selection of arguments mentioned in favour of mandatory fitting of ABS:

- proven technology and justified in terms of projected benefits;
- maximization of technology safety potential;
- ABS would dramatically reduce serious injuries and fatalities of motorcycle riders in road accidents;

The replies of the respondents categorised under 'Relatively Favourable' indicated basic agreement with mandatory fitting of ABS, but:

- like for small motorcycles, the fitting of a safety system such as ABS to remain as an option;
- at first, it should be proven if a voluntary agreement is affordable;
- a robust Impact Assessment analysis demonstrates a positive cost benefit ratio.

From the eleven Public Authorities that responded to this question, five were in favour, two were relatively favourable and three respondents were against mandatory equipping a motor cycle with ABS.

A number of alternative solutions were suggested to improve safety, which were not limited to the technological arena only. Examples of these suggestions were e.g. training, awareness campaigns and improvement of the infra-structure.

## 3.3.2. Anti-tampering measures

**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?

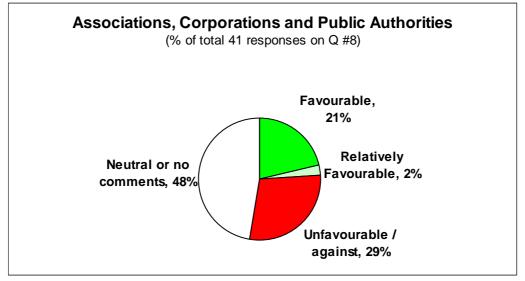


Figure 10: Result of responses from Associations, Companies and Public Authorities on question #8

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

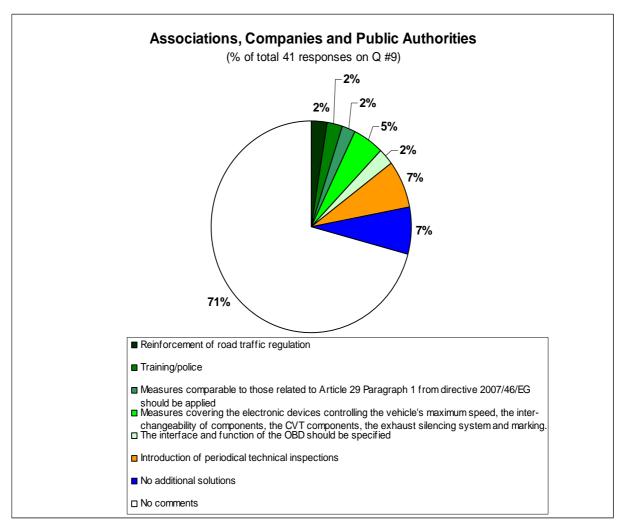


Figure 11: Result of responses from Associations, Companies and Public Authorities on question #9.

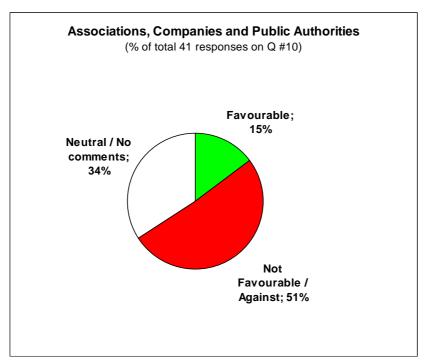
The majority of respondents were against additional measures in terms of anti-tampering. A collection of arguments from:

- Respondents in favour:
  - o market migration towards electronic engine management systems, therefore align legal requirements with technology.
- Respondents against additional anti-tampering measures:
  - o extension of these measures to larger capacity motorcycles would have no advantage to either the industry or the consumer.
  - o supporting the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment
  - o a fear is that rather than break the law, most riders would delay essential maintenance until absolutely necessary, which may cause accidents.

Many respondents agreed in principle so long as the scope of anti-tampering measures is not extended to categories other than those already regulated. Also, some respondents requested an update of TÜV study results and suggested taking measures against electronic manipulation.

### 3.3.3. Power limitation

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

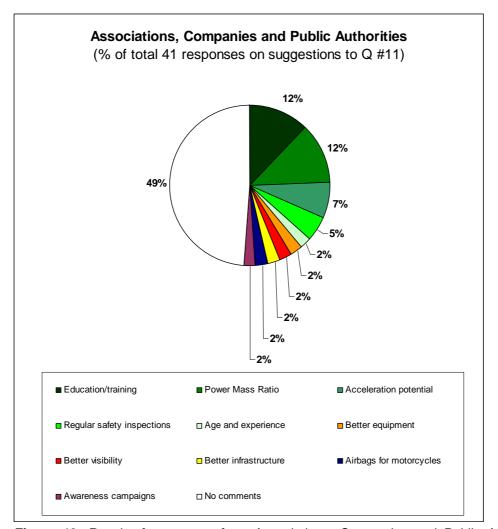


**Figure 12:** Result of responses from Associations, Companies and Public Authorities on question #10.

Five of the eleven Public Authority respondents were in favour versus four which were not in favour of a mandatory power restriction. The great majority of the respondents who were against giving Member States the option of limiting the maximum power of motorcycles to 74 kW argued that there is no scientific evidence to support the linkage between high speed and accident risks

The respondents in favour referred to generic traffic safety considerations or to the liberty for Member States to limit engine power on a national basis. A number of alternative solutions and its support were shown in the next figure.

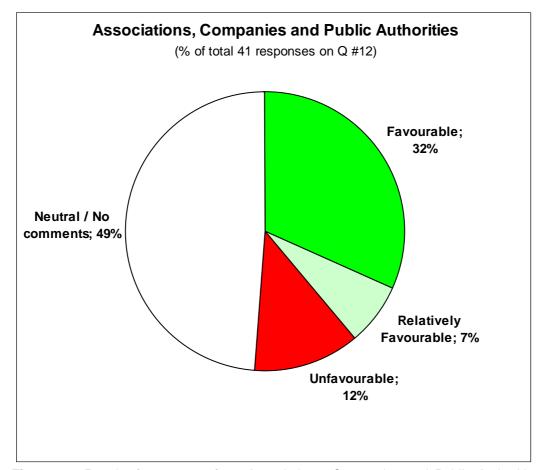
**Question 11:** Do you think that alternative criteria could be used (i.e. Power to mass ratio, acceleration potential) to limit the accident occurrence of motorcycles?



**Figure 13:** Result of responses from Associations, Companies and Public Authorities on suggestions associated with question #11.

## 3.3.4. Mini-cars (Categories L6 and L7 quadricycles)

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



**Figure 14:** Result of responses from Associations, Companies and Public Authorities question #12.

The 13 respondents in favour of the statement in question #12 argued that e.g. Europe represents a high share of the global market, to comply with the internal market rules or concerns regarding the inclusion of these vehicles in accident statistics in some EU Member States through licence requirements that included them as a variant of the motorcycle.

An argument used by the respondents against EU legislation: their preference for national legislation of these types of vehicles.

**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?

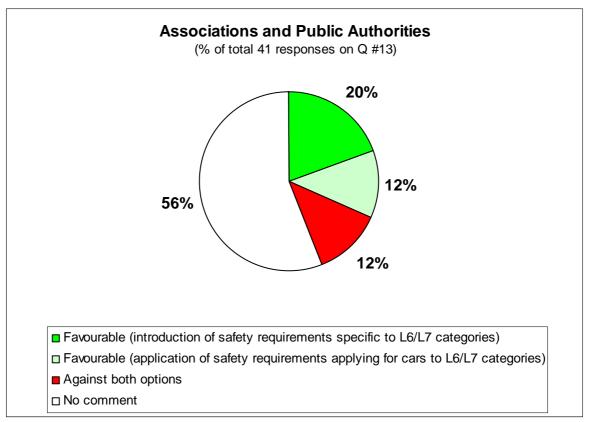


Figure 15: Result of responses from Associations, Companies and Public Authorities question #13.

The majority of the survey participants did not reply to this question. Thirteen respondents were in favour of stricter definitions, two third of this group of respondents were in favour of dedicated L6/L7 category vehicle requirements and approximately one third of this group was in favour to copy and paste the passenger car requirements. From the eleven Public Authorities, seven were in favour of stricter requirements, either related to mass in running order (two) or by complying with passenger car requirements (four respondents).

## 3.3.5 Off-road quads (L7)

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

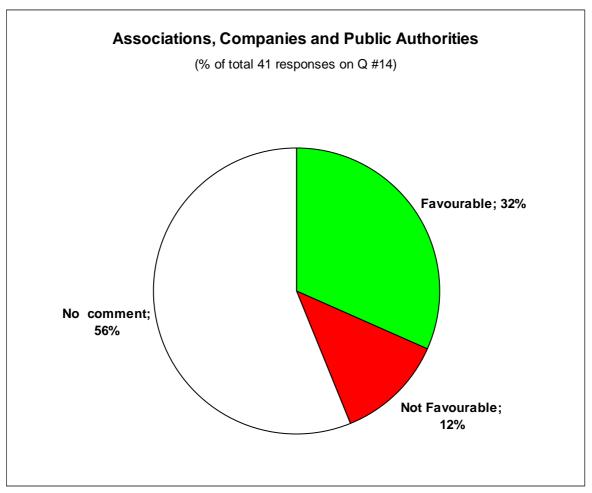


Figure 16: Result of responses from Associations, Companies and Public Authorities question #14

The majority of the respondents that chose to reply to question #14 were in favour of the All Terrain Vehicles (ATV) / Off-road quads category of vehicles to fall under the scope of L-category vehicle type approval.

From the Public Authorities four respondents were in favour versus four that were against these vehicles to be type approved as L-category vehicle. One of this category respondent claimed that the original aim of these vehicles was off-road use. Therefore, the prescriptions for such vehicles should be modified and adapted to follow much more the principles of forestry and agricultural tractors. Another Public Authority in favour replied: 'L7 vehicles can be designed for on-road use and therefore specific legislation is needed to allow the access to public roads of these vehicles.'

**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?.

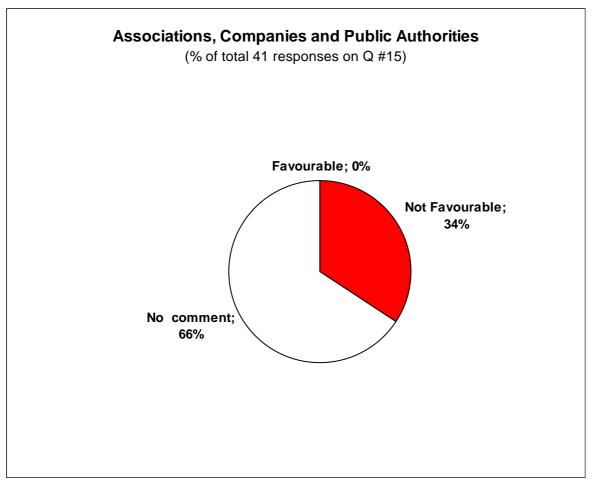
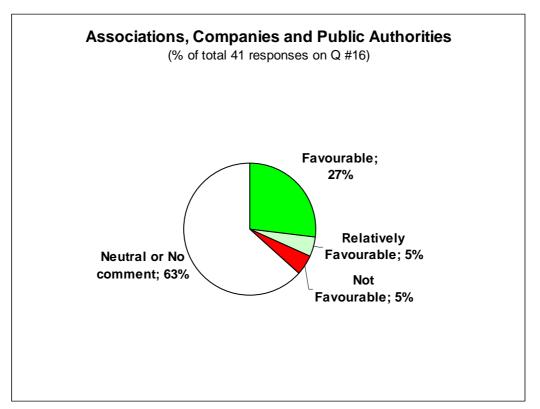


Figure 17: Result of responses from Associations, Companies and Public Authorities question #15

There was a consensus amongst the respondents that replied to the question, which was well summarised by one of the respondents: 'There is a clear and urgent need to be able to distinguish the different categories of micro car, off-road quad, leisure quad, and agricultural quad, and for appropriate standards to be applied to the different designs.'

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



**Figure 18:** Result of responses from Associations, Companies and Public Authorities question #16

Again the great majority of the respondents that did reply to this question were in favour of new specific requirements to this type of vehicles. Stakeholders, who did not agree with the introduction of new measures, suggested, creating a new, designated category for such vehicles.

## 3.3.6. Safety of hydrogen powered L category vehicles.

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

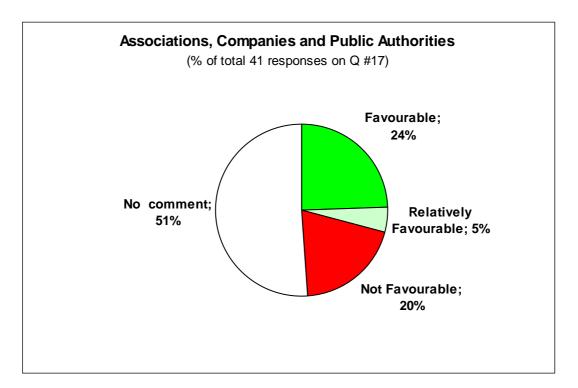


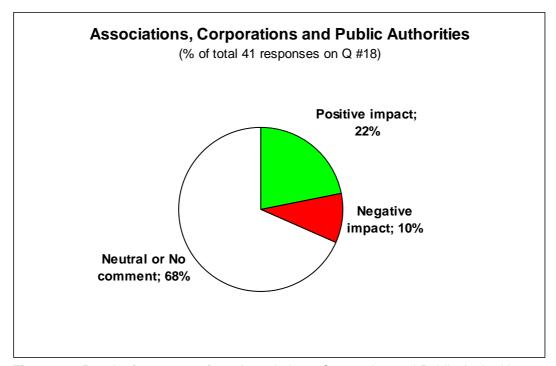
Figure 19: Result of responses from Associations, Companies and Public Authorities question #17.

There was a slight majority of respondents in favour of regulating L-category vehicles using hydrogen as fuel.

Most of the stakeholders who are against the introduction of EU legislation on Hydrogen argued that this technology is still in its infancy and that legislation might hinder innovation. The Motorcycle Industry is of the opinion that EU legislation on hydrogen Powered Two Wheelers is not needed for the very next future. Prototypes could be individually type-approved at national level or subject to an exemption of the current framework directive.

## 3.4. Overall impact of the legislation on the competitiveness of EU industry

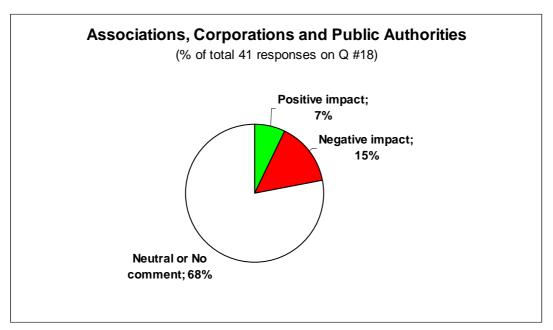
Question 18: What do you think will be the impact of the range of measures that are outlined above on the competitiveness of the EU industry, and in particular SMEs?



**Figure 20:** Result of responses from Associations, Companies and Public Authorities question #18.

Six respondents postulated a positive impact of the measures on the competitiveness of EU industry. EU industry should, it was felt, benefit from the introduction of advanced technologies and from an improvement in their products, with a positive influence on foreign markets. However, four stakeholders saw the proposed legislation as a risk for their activities and their suppliers, in particular for Small and Medium Enterprises (SMEs).

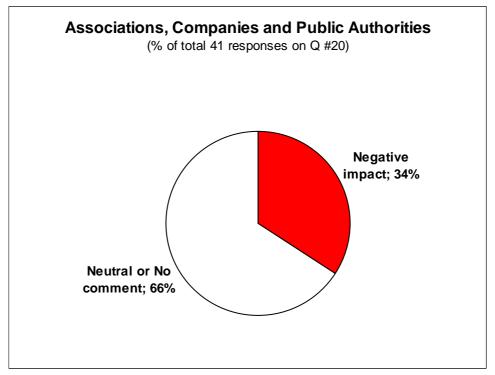
Question 19: What will be the impact of the measures on employment in the EU?



**Figure 21:** Result of responses from Associations, Companies and Public Authorities question #19.

Four respondents thought that the introduction of these new measures is likely to have a positive impact on employment rates within the EU, owing to the development of new technologies by suppliers and increased production capacity. However, the majority of participating stakeholders were sceptical regarding the added costs that EU legislation might generate.

**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?



**Figure 22:** Result of responses from Associations, Companies and Public Authorities question #20.

The majority of survey participants did not chose to reply to the final question whether they anticipated that the customer end-price would significantly increase owing to the implementation of potentially new, more severe legal requirements in terms of emissions and/or safety. There seemed to be a consensus among the survey participants that did reply to this final question of the public consultation, summarised by the following statement and quotes from respondents:

- Rapid change in legislative requirements could lead to detrimental effects on customer end prices.
- 'The measures proposed are likely to reduce the overall cost of compliance and design which are
  considerable costs in terms of small volume producers. However, mandatory ABS or other braking
  systems or even EU only power restrictions would undo any benefit and would probably even increase
  price beyond the current levels.'
- 'Introducing measures to improve the safety of micro cars would include significant costs to manufacturers if compliance with full passenger car requirements is introduced in an unrealistic time scale. Mandating ABS or other advanced safety measures is likely to impose disproportionate costs on smaller machines compared to larger ones.'

## 4. SUMMARY OF RESPONSES FROM THE SIXTEEN INDIVIDUAL CITIZENS

Seven citizens, of the in total sixteen individuals who responded to the survey, were not in favour of using a single basic regulation and the split-level approach. Some thought that this was undemocratic and that legislation at EU level might diminish legislative power at national level. Only five people had something to say about whether the proposed legislation should increasingly include UNECE references. Four were against the approach while one was in favour.

Concerning emission measures, six out of the sixteen respondents were against the introduction of new emission limits for motorcycles equivalent to Euro 5 limits for petrol cars. Besides that, seven respondents were not in favour of including additional emission measures into the legislation. In addition, seven respondents were against mandatory ABS on motorcycles while six respondents disagreed with the introduction of anti-tempering measures in the legislation.

Moreover, most of the respondents expressed opposition to the option given to Member States to limit the maximum power of motorcycles to 74 kW. Some argued that driver behaviour is one of the main reasons for accidents, prompting awareness campaigns and training to be suggested as alternative solutions. Other measures were mentioned, such as better road infrastructure, better training for drivers of four-wheeled vehicles, or even a race track in every province.

Regarding mini-cars (L6 and L7 quadricycles), a few respondents were not in favour of introducing EU legislation, arguing that this market is not important enough to propose new legislation. Some respondents were against including quads in EU type-approval, arguing that these vehicles are not primarily designed to be on the road, and backing the addition of new requirements to improve the safety of those vehicles.

As regarding the legislation on hydrogen vehicles, five out of the sixteen respondents were not in favour of introducing new EU legislation. Some thought it was too early to impose restrictions on such vehicles and that legislation would hinder innovation.

As for the impact of the legislation on the competitiveness of EU industry, many citizens responding to the survey viewed the impact to be negative. Consumers will have to pay more for new vehicles and small businesses may suffer from the new legislation and will therefore not be able to compete against the big companies. Some were concerned that this legislation will have a negative impact on the customised motorcycle industry and that employment within that industry will decrease.

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## **ATTACHMENT 1:** Consultation document

### 1. INTRODUCTION

Directive 2002/24/EC<sup>2</sup> 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 Directive<sup>3</sup> 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 21<sup>4</sup> 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 Paper<sup>5</sup>, 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/EC<sup>6</sup> 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 twoand 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 threewheelers envisaged by the Commission services.

## 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

<sup>3</sup> 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

<sup>&</sup>lt;sup>2</sup> OJ L 124, 9.5.2002, p. 1

<sup>&</sup>lt;sup>4</sup> COM/2007/0022 final

<sup>&</sup>lt;sup>5</sup> http://ec.europa.eu/transport/white\_paper/documents/doc/lb\_com\_2001\_0370\_en.pdf

<sup>&</sup>lt;sup>6</sup> OJ L252, 20.9.2002, p.20

b) New safety measures to reduce road casualties, such as advanced braking systems, anti-tampering measures and specific requirements on quads.

#### **Simplification** 2.1.

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 Agreement<sup>7</sup>. The CARS 21 group<sup>8</sup> 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 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/EC9) 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? Whv?

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?

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> COM/2007/0022 final

### 2.2. Emission standards

Directive 97/24/EC<sup>10</sup> 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/EC<sup>11</sup> 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\_meeting97/status\_report\_emissions.pdf

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,  $CO_2$  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  $CO_2$  measurement, fuel consumption, etc. ?

<sup>&</sup>lt;sup>10</sup> OJ L 226, 18.8.1997, p. 1

<sup>&</sup>lt;sup>11</sup> OJ L252, 20.9.2002, p.20

### 2.3. New safety measures

## 2.3.1. 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 charter<sup>12</sup>, 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 coupling braking on all motorcycles and the effect of such legislation

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?

## 2.3.2. 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: Do you think that 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?

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 $<sup>^{12}\,\</sup>underline{http://www.paueducation.com/charter/index.php?lng{=}en}$ 

## 2.3.3. 74 kW power limit for motorcycles

Directive 95/1/EC on maximum design speed, maximum torque and maximum net engine power<sup>13</sup> 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.

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 a 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?

## 2.3.4. 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?

## 2.3.5.Off-road quads (L7 category)

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?

<sup>&</sup>lt;sup>13</sup> OJ L 52, 8.3.1995, p. 1

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?

## 2.3.6. 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?

## 3. 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?

### 4. TIMETABLE

The Commission services intend to introduce a formal proposal to Council and Parliament by mid 2009 (NB will actually be in the 2<sup>nd</sup> quarter of 2010). In the meantime, an Impact Assessment will be prepared covering all aspects of the proposed Regulation.

ATTACHMENT 2: Overview of associations, companies, public authorities and individual citizens that responded to the public consultation on possible policy options for the new framework regulations for L-category vehicles

### 1. Companies and Associations.

- 1) **ACEM**
- **ADAC** 2)
- **AECC** 3)
- Agricultural Engineers Association (AEA)
- 5) Bombardier Recreational Products (BRP)
- 6) Bosch
- British Motorcyclists Federation 7)
- 8) Clepa
- Continental 9)
- 10) Dekra
- 11) EQUAL
- 12) ETRA
- 13) Eurocities
  14) Eurocouncil of the Fédération Internationale de l'Automobile (FIA)
- 15) European Association of ATV Manufacturers (ATVEA)
- 16) European Transport Safety Council (ETSC)
- 17) Fédération Internationale de Motocyclisme (FIM)
- 18) Federmoto
- 19) FEMA
- 20) FFMC
- 21) German Insurance Association
- 22) German Road Safety Council (DVR)
- 23) GTÜ
- 24) Instituto Nacional de Technica Aeroespacial
- 25) Jama Europe
- 26) Schrader Electronics Ltd
- 27) SEGWAY INC.
- 28) SMC
- 29) TÜV
- 30) Vision Zero

## 2. Public authorities

- 1) Baden-Württemberg, Ministry of the Interior
- 2) Confederation Suisse
- 3) Elspeth Attwooll MEP
- 4) German Federal Government
- 5) Hungary
- 6) Mecklenburg-Vorpommern, Ministry of the Interior
- 7) Ministry for the Environment, the Netherlands
- 8) RDW Netherlands
- 9) Road Safety and Transport Agency, DK
- 10) The Italian Ministry of Infrastructure and Transport
- 11) UK Department of transport

## 3. Citizens

- Mark Barrow
- Graham Cartledge 2)
- 3) Richard Hind
- 4) Philip Hobden
- 5) Jeremy Hughes
- 6) James Loder
- M A Teasdale 7) 8) Steve Peake
- 9) Rishi Rai
- 10) Martin Schlecht
- 11) Dierk Schmidt
- 12) Tony Stangoe
- 13) Iain Thomson
- 14) Roger Wakeford
- 15) James Wood
- 16) Freddy Houben

# **ATTACHMENT 3: Classification results**

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

### Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Favourable (+)	
2	ADAC	Favourable (+).	The simplification of the legislation is especially positive for smaller manufacturers
3	AECC	Favourable (+)	
4	Agricultural Engineers Association (AEA)	Favourable (+)	
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Favourable (+)	
7	Bosch	No comment	
8	British Motorcyclists Federation	Favourable (+)	
9	Clepa	Favourable (+)	
10	Continental	No comment	
11	Dekra	Favourable (+)	However, single approval should be regulated within the framework under the principle of subsidiarity
12	EQUAL	Favourable (+)	
13	ETRA	Favourable (+)	
14	Eurocities	Favourable (+)	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable (+).	The simplification of the legislation is especially positive for smaller manufacturers
16	European Association of ATV Manufacturers (ATVEA)	Favourable (+)	
17	European Transport Safety Council (ETSC)	Favourable (+)	The creation of such a generalised framework should allow other externalities from transport to be covered and not just those mentioned in the proposal.
18	Fédération Internationale de Motocyclisme (FIM)	Favourable (+)	
19	Federmoto	Favourable (+)	
20	FEMA	Neutral	FEMA does not oppose the simplification of regulations and the replacement of the Framework Directive and its separate Directives by a single Framework Regulation, which would repeal 14 Directives.
21	FFMC	Favourable (+)	
22	German Insurance Association	No answer	
23	German Road Safety Council (DVR)	No answer	
24	gтü	Favourable (+)	
25	Instituto Nacional de Tecnica Aerospacial	Relatively Favourable. (+)	However, some doubts whether this legislation would really lead to simplifications
26	Jama Europe	Favourable (+)	
27	Schrader Electronics Ltd	No comment	
28	SEGW AY INC.	No comment	
29	SMC	Favourable (+)	
30	тΰν	Favourable (+)	However, single approval should be regulated within the framework under the principle of subsidiarity

## Public Authorities

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+),	Single type approval should be maintained at national level
2	Confederation Suisse	Favourable (+)	
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Not Favourable (-)	
5	Hungary	Favourable (+)	
6	Innenministerium Mecklenburg-Vorpommern	No Comment	
7	Ministry for the Environment The Netherlands	Favourable (+)	
8	RDW Netherlands	Not favourable (-)	RDW does not see that there is a real need to change the present system according to Directive 2002/24/EC, which in the opinion of RDW functions well.
9	Road Safety and Transport Agency, DK	Favourable (+)	
10	The Italian Ministry of Infrastructure and Transport	Favourable (+)	
11	UK Department for transport	Relatively Favourable. (+)	However, according to the UK goxt, this proposal is not going to deliver the promised simplication because 1) there are no parallel UNCE Regulations for many of the Directives and some experience with the new general safety regulation should be first gained before extending it to other categories

Table 1: Classification table with replies to question #1

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

### Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Favourable (+)	Supports in principle the increased use of references to UNECE Regulations (including GTRs)
2	ADAC	Favourable (+)	Provides a valuable step towards international harmonization, (-) any users of the legislation now need to blend numerous documents together to determine the precise requirements and procedures
3	AECC	Favourable (+)	
4	Agricultural Engineers Association (AEA)	Unfavourable	This should be included in OECD/CEN/ISO
5	Associazione Onlus	No Comment	
6	Bombardier Recreational Products (BRP)	Favourable (+)	BRP supports the replacement of separate (EU) directives by their equivalent UNECE regulations where appropriate.
7	Bosch	No comments	
8	British Motorcyclists Federation	Favourable (+)	
9	Clepa	Favourable (+)	
10	Continental	No comments	
11	Dekra	Favourable (+)	International harmonization
12	EQUAL	Relatively Favourable	Due to the special characteristics of motorcycles, EQUAL is concerned by a potential transposition of directives applied for cars to motorcycles
13	ETRA	Favourable(+)	
14	Eurocities	Relatively Favourable	Possible disantvantage: potential delays due to objections of other countries outside EU (-)
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable (+)	
16	European Association of ATV Manufacturers (ATVEA)	Relatively Favourable	ATVEA has no objections to the principle of the UNECE references. (-) the category of ATVs is not considered by UNECE. ATVEA strongly believes that the EU should continue to regulate these vehicles at European level, rather than at ECE level. Certain construction requirements for ATVs can be based on UN-ECE Regulations, but this should be done on a case by case basis, without transferring the ATV category as such to the UN-ECE where other authorities participating in the debate have no interest in ATVs.
17	European Transport Safety Council (ETSC)	Unfavourable	ETSC is concerned about the implications of passing on its regulatory powers to the UN. The UNECE process excludes the European Parliamentary inspection and amendment. Moreover due to the larger number of parties involved in the process the lowest common denominator is likely to set a lower bar for regulation. This may also have negative implications for the high levels of safety needed for vehicles in the EU.
18	Fédération Internationale de Motocyclisme (FIM)	Favourable (+)	International harmonization (+): facilitation of innovation by PTW manufacturers, improvement of transparency to PTW users, safety benefits
19	Federmoto	Favourable (+)	
20	FEMA	Relatively Unfavourable	In principle not against the increased use of references to UNECE regulations. However, potential negative aspects: :unnecessarily complex regulations and democracy gap resulting from delegating future regulatory work to UNECE, out of the European Parliament's control.
21	FFMC	Relatively Unfavourable	Basicaly not against. However, concerned by a potential democractic deficit.
22	German Insurance Association	No comments	
23	German Road Safety Council (DVR)	No comments	
24	GTÜ	No comments	
25	Instituto Nacional de Tecnica Aerospacial	Relatively Favourable	In principle yes. However, no clear view if this way is going to produce, such simplifications.
26	Jama Europe	Favourable	
27	Schrader Electronics Ltd	No comments	
28	SEGW AY INC.	No answer	
29	SMC	Relatively Favourable	However; combination between simplification of the legislation and reference to UNECE) may result in creating unnecessarily complex regulations.
30	ΤÜV	Relatively Favourable	Yes, Clarifications regarding regulations on the application of new technolgies should be made
	uthorities	r	1-
#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+)	
2	Confederation Suisse	Favourable (+)	
3	Elspeth Attwooll MEP	No comments	
4	German Federal Government	Favourable (+)	
5	Hungary	Favourable (+)	
7	Innenministerium Mecklenburg-Vorpommern  Ministry for the Environment The Netherlands	No comments  Favourable (+)	
8	RDW Netherlands		DDW does not see that there is a real pood to change the present suptem
9	Road Safety and Transport Agency, DK	Neutral Favourable (+)	RDW does not see that there is a real need to change the present system
10	The Italian Ministry of Infrastructure and Transport	Favourable (+)	
11	UK Department for transport	Relatively Favourable	However, there are directives where no corresponding UNECE equivalent exist: Directives should be retained until equivalent UNECE regulations have been entered into force
<b>——</b>	ı	l .	and squitable office regulation have been entered into tube

**Table 2:** Classification table with replies to question #2.

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

### Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	ACEM supports the introduction of all administrative measures introduced for motor vehicles (Directive 2007/46/EC) in the legislation on two- and three-wheelers.
2	ADAC	No comments	
3	AECC	No comments	
4	Agricultural Engineers Association (AEA)	No comments	
5	Associazione Onlus	No comments	
6	Bombardier Recreational Products (BRP)	Neutral	BRP supports the simplification of the legislation on two- and three-wheelers by aligning framework directive 2002/24/EC with framework directive 2007/46/EC
7	Bosch	No comments	
8	British Motorcyclists Federation	No comments	
9	Clepa	No comments	
10	Continental	No comments	
11	Dekra	Neutral	Principle of subsidiarity/Single type approval should be maintained at national level
12	EQUAL	Neutral	Most companies in their industry do not have the structure/ressources to implement the procedures of the virtual and self testings
13	ETRA	No comments	
14	Eurocities	Unfavourable	Noise limits must be stricter than the current
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	No comments	
16	European Association of ATV Manufacturers (ATVEA)	No comments	
17	European Transport Safety Council (ETSC)	No comments	
18	Fédération Internationale de Motocyclisme (FIM)	Unfavourable	All administrative measures introduced under Directive 2007/46/EC should be included in legislation on two and three wheelers.
19	Federmoto	Unfavourable	
20	FEMA	Unfavourable	It is important to have a legal framework that allows national regulation.
21	FFMC	Neutral	In favour of a national regulation that allows modifications, rebuilding and amateur-built motorcycles should be maintained.
22	German Insurance Association	No comments	
23	German Road Safety Council (DVR)	No comments	
24	gтü	Unfavourable	Individual Approvals (Article 24 (Directive 2007/46/EC)) should be included into new legislation
25	Instituto Nacional de Tecnica Aerospacial	No comments	
26	Jama Europe	Unfavourable	JAMA believes that all administrative measures for motor vehicles (Directive 2007/46/EC) should be included in the legislation on two- and three-wheelers
27	Schrader Electronics Ltd	No comments	
28	SEGWAY INC.	No comments	
29	SMC	Neutral	It is important to have a framework that allows national regulation. A national regulation that allows modifications, rebuilding, and amateur-built motorcycles should be maintained.
30	TÜV	Unfavourable	Yes, "individual license" should continue to be dilevered at national level.

### **Public Authorities**

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Unfavourable	Supports the introduction of all administrative measures introduced for motor vehicles (Directive 2007/46/EC) in the legislation on two- and three-wheelers.
2	Confederation Suisse	Unfavourable	It is not appropriate to have too low requirements for vehicles produced in small series
3	Elspeth Attwooll MEP	No comments	
4	German Federal Government	Neutral	Additional measures should not be included into the legislation for now.
5	Hungary	No comments	
6	Innenministerium Mecklenburg-Vorpommern	No comments	
7	Ministry for the Environment The Netherlands	Unfavourable	The Netherlands supports the introduction of all administrative measures introduced for motor vehicles (Directive 2007/46/EC) in the legislation on two- and three-wheelers
8	RDW Netherlands	Neutral	RDW suggests that a new regulatory act, if needed, should not incorporate the individual approvals, which should be dealt with on a national base
9	Road Safety and Transport Agency, DK	No comments	
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	Supports the application to L vehicles of every administrative measure introduced by 2007/42/EC
11	UK Department for transport	Unfavourable	The UK gvt supports the introduction of all administrative measures introduced for motor vehicles (Directive 2007/46/EC) in the legislation on two- and three-wheelers.

**Table 3:** Classification table with replies to question #3.

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

## Associations and Companies

#	Respondent Name	Reply	C om ment
1	ACEM	Relatively Favourable	Supportive but in a a two-step approach
2	ADAC	Favourable (+).	However it should not have have an negative impact on the competitiveness of the European manufacturers
3	AECC	Favourable (+).	AECC supports the introduction of new tighter emission limits for motorcycles equivalent to Euro 5 limits for petrol cars
4	Agricultural Engineers Association (AEA)	No comment	
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Relatively Unfavourable	BRP against imposing the same emission levels to all L-category vehicles, without respecting the diverse nature, use and specific characteristics of the different subcategories within the L-category.BRP proposes a phased introduction of the following emission levels for three-wheeler category L5e: Euro 3 by 2012, Euro 4 by 2015, Euro 5 by 2018
7	Bosch	No comment	
8	British Motorcyclists Federation	Favourable (+)	BMF would be keen to see this introduced as soon as possible, preferably prior to 2012.
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	No comment	
12	EQUAL	No comment	
13	ETRA	Favourable (+)	
14	Eurocities	Favourable (+)	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Relatively Favourable	In principle yes. This could be an objective for 2015. An earlier introduction could particularly overcharge the smaller manufacturers
16	European Association of ATV Manufacturers (ATVEA)	Relatively Favourable	ATVEA proposes testing methods and emission levels which would reflect better the use and characteristics of ATVs (G1 cycle)
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Relatively Favourable	However, needs of consumers and industry regarding costs should be taken into account
19	Federmoto	Favourable (+)	
20	FEMA	Favourable (+)	However, the introduction of both general emissions targets and CO2 targets should be 2012.
21	FFMC	Relatively Favourable	Provided that specifities of the sector is taken into account
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Unfavourable	No. Before introducing a new set of limits for additional emission measures, it would be essential to evaluate the efficiency of the current emission limits.
26	Jama Europe	Relatively Favourable	JAMA supports the introduction of new emission limits for motorcycles under the reasonable lead-time and the cost effectiveness (ACEM proposal) equivalent to Euro 5 limits
27	Schrader Electronics Ltd	Favourable (+)	
28	SEGWAY INC.	No comment	
29	SMC	Favourable (+)	
30	TÜV	Favourable (+)	

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+)	
2	Confederation Suisse	Favourable (+)	Yes
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Favourable (+)	
5	Hungary	Relatively Favourable	generally supports the stricter rules, but the definition of the equivalency is not easy. All measurements have a great importance which result the decrease of the CO2 emission.
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Favourable (+)	A two-step approach (first step, applicable simultaneously with the future regulation; second step, a minimum of three years later)
8	RDW Netherlands	Favourable (+)	New emission limits for motorcycles using the WMTC are feasible now. Establishing equivalence with Euro- 5 is a problem in itself (different cycles, different vehicles, different gear change prescriptions)
9	Road Safety and Transport Agency, DK	Favourable (+)	Yes
10	The Italian Ministry of Infrastructure and Transport	Relatively Favourable	supports the introduction of a further stage for motorcycles equivalent to EURO 5 for petrol cars in the case it would allow also an enforcement lead time equivalent to the one adopted for motor-vehicles (10 years), eventually coupled with an intermediate step
11	UK Department for transport	Unfavourable	1) supports global harmonization (GTR), 2) against alignement with EUR 5 standards

Table 4: Classification table with replies to question #4.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Favourable (+).	ACEM is fully supportive of the introduction of the above mentioned additional measures as specified and agreed in the 1st December 2005 MYEG meeting (DG/ENTR Status Report, 23 November 2005).
2	ADAC	Unfavourable	No, not necessary
3	AECC	Favourable (+).	AECC also supports the introduction of durability requirements.
4	Agricultural Engineers Association (AEA)	Relatively Favourable	Yes. However, this needs a structured approach and phasing in over several years
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Relatively Favourable	BRP supports the introduction of the additional measures as proposed by the M/WG of durability; evaporative emissions control; CO2 measurement and fuel consumption. However, BRP wants to stress the importance of the introduction of a unified test and a unified method of publication of CO2 and fuel consumption data in all 27 member states.
7	Bosch	No comment	
8	British Motorcyclists Federation	Unfavourable	BMF does not see why additional measures should be introduced at this stage, except for the addition of a CO2 measurement. BMF strongly suggests that an equivalent value should be introduced for the test procedure for motorcycles.
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Relatively Favourable	Not favourable (-) for fuel consumption measurement
12	EQUAL	Unfavourable	No, because the introduction of additional measures would require heavy investments in R&D
13	ETRA	Unfavourable	Instead of adding additional measures, supports the introduction of harmonised periodic inspections of PTWs.
14	Eurodities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable (+).	
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Favourable (+).	The basis on which progress can be made is already agreed by the MMEG and covered by DG/ENTR Status Report of 23 November 2005.
19	Federmoto	Favourable (+).	According to Federmoto, cars cause more pollution than motorcycles. Therefore, the calculation of taxes should be taken into account that factor.
20	FEMA	Neutral	FEMA believes that there should be an EU standard for CO2 emissions on bikes. FEMA is very concerned about the prospect of having a different test cycle for bikes and cars. If they have the same limits, they should have the same test cycle. If they have different test cycles, they should have equivalent limits and a methodology for establishing equivalent values for all pollutants including CO2.
21	FFMC	Neutral	Favourable for the introduction of fuel consumption measurement
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	σΰ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Relativeley Favourable	Provided that that a time is given to industry to adapt to the new measures
26	Jama Europe	Favourable (+).	JAMA supports the series of complementary measures for the introduction of this package, consisting of emissions durability, evaporative emission control and the measurement of CO2 emissions and fuel consumption.
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	Neutral	There should be an EU standard for CO2 emissions and fuel consumption on bikes.
30	TÜV	Favourable (+).	Agree (+). Open for additional measures that contribute to long-term reduction of harmful emissions

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+).	The same approach for M 1 vehicles should be applied for L vehicles to reach similar environmental friendly results.
2	Confederation Suisse	Favourable (+).	Fuel consumption, CO2, Particle mass and particle number should be included
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Favourable (+).	is agreed of the mentionned additional measures
5	Hungary	Favourable (+).	Accepts the introduction of OBD for bigger motorcycles and supports the introduction of WMTC together with the measuring of the CO2 emission and the consumption.
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Favourable (+).	The Netherlands is fully supportive of the introduction of the above-mentioned additional measures as specified and agreed in the 1st December 2005 M/EG meeting (DG/ENTR Status Report, 23 November 2005).
8	RDW Netherlands	Favourable (+).	Introduction of evaporative emissions limits and durability limits would be worthwhile considering. Determining fuel consumption and CO2 is useful for information purposes
9	Road Safety and Transport Agency, DK	Favourable (+).	Denmark does not object to the introduction of additional measures such as CO2 and fuel consumption
10	The Italian Ministry of Infrastructure and Transport	Favourable (+).	would support the introduction of the additional emission measures as from the status report on 2-3wheelers presented at the 97th MVEG
11	UK Department for transport	Relativeley Favourable	Additional emissions control measures would be acceptable if there are in practice emissions control problems with current motorcycles, and provided that these problems could be addressed in a cost effective manner by additional provisions. Evaporative emissions control measures would also need to be justified in terms of cost and benefit

**Table 5:** Classification table with replies to question #5.

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

#### **Associations and Companies**

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	According to ACEM, a mandatory fitting of ABS is not the solution, and that the development of advanced
2	ADAC	Unfavourable	braking systems should be left to the market Voluntary approach instead of mandatory approach.
3	AECC	No comment	Voluntary approach inclose of mendatory approach.
4	Agricultural Engineers Association (AEA)	No comment	
5	Associazione Onlus	Favourable (+)	Any motorcycle should be fitted with an ABS system
6	Bombardier Recreational Products (BRP)	Unfavourable	From a three-wheeler (L5e) perspective the use of ABS is obviously the right technology for the application. BRP does not believe ABS should be required on ATVs. By focusing on ABS, the EU would implicitly impose limitations on the R&D of new and other existing braking systems.
7	Bosch	Favourable (+)	Motorcycle ABS is a proven technology and justified in terms of projected benefits. A timely market deployment of Motorcycle ABS to all vehicles above 125cc will allow the maximization of the safety potential of the technology and accelerate the full adaptation of ABS technology in the large volume market of 125cc to 250cc.
8	British Motorcyclists Federation	Unfavourable	Not favourable (-) because this would a) require a testing regime and definition, b) hinder innovation and c) add cost during the purchasing process and during maintance
9	Clepa	Favourable (+)	Above all, CLEPA supports a mandatory fitting of ABS on all motorcycles.
10	Continental	Favourable (+)	A mandatory equipment of motorcycles with ABS would dramatically reduce serious injuries and fatalities in motorcycle riders
11	Dekra	Relatively Favourable	Supports a mandatory fitting of a safety system (not exclusively ABS) which prevents the wheels on a motor vehicle from locking while braking. For small motorcycles, the fitting of a safety system such as ABS should remain as an option
12	EQUAL	No comment	
13	ETRA	Unfavourable	(-) ETRA is not in favour of mandatory fitting of ABS on all motorcycles.ETRA believes that a legal obligation may well have an adverse effect on the technological developments in the field of advanced braking systems for motorcycles.
14	Eurocities	No comment	No comment
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Relatively Favourable	Desirable:Firstly, it should be proved if a voluntary agreement is affordable. In case of a negative outcome, the mandatory fitting should be considered.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	Favourable (+)	Positive, ABS and advanced braking systems should gradually be mandatory for all PTWs
18	Fédération Internationale de Motocyclisme (FIM)	Neutral	FIM calls for a differentiated approach for braking standards. Any "one fits all" standard cannot guarantee the safety of the broad variety of PTW sizes and uses. Not all PTWs are alike and different advanced solutions should be then applied. A combination of ABS and CBS is desirable for larger machines but it depends again on the types of PTW.
19	Federmoto	Favourable (+)	
20	FEMA	Unfavourable	FEMA's position is that there should be no change to the current situation: ABS should not be made mandatory
21	FFMC	Relatively Favourable	ABS is essential. However, potential negative impact on machinery costs and the development of new technologies
22	German Insurance Association	Favourable (+)	
23	German Road Safety Council (DVR)	Favourable (+)	However, according to DVR using ABS in some situations might not be advantageous. Therefore, DVR supports the mandatory fitting of ABS with the option to desactivate the system when the situatons in question might occur
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Relatively Favourable	ABS should be mandatory for motorcycles of high performance
26	Jama Europe	Unfavourable	JAMA expresses opposition to a mandatory fitting of ABS on all motorcycles.
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC 	Unfavourable	ABS should not be made mandatory.
30	TÜV	Favourable (+)	

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+)	
2	Confederation Suisse	Favourable (+)	Mandatory fitting of ABS on all motorcycles in several stages
3	Elspeth Attwooll MEP	Unfavourable	Because of potential high maintenance costs
4	German Federal Government	Favourable (+)	
5	Hungary	Relatively Favourable	does not know any studies or test results supporting the compulsory application of motorcycle ABS. H. believes that the manufacturers will fit this equipment for those vehicles where the price can afford to include the additional costs
6	Innenministerium Mecklenburg-Vorpommern	Favourable (+)	
7	Ministry for the Environment The Netherlands	No comment	
8	RDW Netherlands	Unfavourable	it should not be mandated and its fitting can be left to the market
9	Road Safety and Transport Agency, DK	Favourable (+)	Positive as it would improve safety and stability
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	
11	UK Department for transport	Relatively Favourable	The UK supports effective safety measures provided a robust Impact Assessment demonstrates a positive cost benefit.

Table 6: Classification table with replies to question #6.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Refer to graph	ACEM believes that it would be impractical to translate into legislation the rich variety of systems and combinations of systems and their adaptation to the variety of motorcycles and uses.
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Refer to graph	No not for Quadricycles
5	Associazione Onlus	Refer to graph	Coupled braking helps in avoiding locks and preserving stability, and could be used instead of ABS on slower motorcycles, for cost reduction all motorcycles equipped with ABS should also be fitted with a traction control system
6	Bombardier Recreational Products (BRP)	Refer to graph	For three-wheeled vehicles (L5e), there are several additional safety measures which could also be introduced in addition to ABS, such as the Proportional Brake System (PBS), the traction control system (TCS), and the Roll Over Mitigation (ROM) System. BRP's Can Am Spyder Roadster is already equipped with these systems.
7	Bosch	Refer to graph	According to Bosch, there is currently no other system for motorcycles on the market providing the same driving safety for the same cost efficiency as a motorcycle ABS
8	British Motorcyclists Federation	Refer to graph	Rider training is cheaper and more effective both in terms of accident avoidance and damage mitigation.
9	Clepa	Refer to graph	No. ABS seems to be the most efficient system.
10	Continental	Refer to graph	Several options in addition to ABS: RLP (Rearwheel Liftoff Protection), Integral Brake Function, TCS (Traction Control System), However, as a base of active motorcycle safety Confinental sees the ABS as the core element to reduce fatalities on European roads.
11	Dekra	Refer to graph	Airbags, Improvement of the road infrastructur through crashbarriers, motorcycle helmets, Reinforcement of visibility
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurodities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Refer to graph	No. ABS seems to be the most efficient system.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	Refer to graph	ETSC experts are of the opinion that ABS and advanced braking systems should gradually become mandatory for all PTWs and that riders be educated regarding their use and benefits. The variety of other advanced braking systems should be evaluated for their safety impact and, if more cost-effective, be considered as an alternative to ABS.
18	Fédération Internationale de Motocyclisme (FIM)	Refer to graph	FIMcalls for a differentiated approach for braking standards. Any "one fits all" standard cannot guarantee the safety of the broad variety of PTW sizes and uses. Not all PTWs are alike and different advanced solutions should be then applied. A combination of ABS and CBS is desirable for larger machines but it depends again on the types of PTW.
19	Federmoto	Refer to graph	Warning system, awareness compaigns
20	FEMA	Refer to graph	Manufacturers should continue to develop and introduce advanced (better) braking systems and other/supplementary solutions, such as combined brake systems and antilock- brake systems. But these systems should not be made mandatory.
21	FFMC	Refer to graph	Coupled brakings may be more efficient than ABS
22	German Insurance Association	Refer to graph	No S
23	German Road Safety Council (DVR)	Refer to graph	The fitting of ABS should not be mandatory for lowerd motorcycles (Power Limit less than 50km/h)
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	No comment	Not known
26	Jama Europe	Refer to graph	The current variety of advanced brake systems allowmanufacturers to develop the most cost effective solution for a certain category, taking the specific characteristics of these PTWs into account.
27	Schrader Electronics Ltd	Refer to graph	Tyre Pressure Monitoring (TPM) Systems should be also considered in the intent of maximising safety for motorcycles.
28	SEGWAY INC.	Refer to graph	The variety of other braking systems should be evaluated for their safety, and if more cost effective, be considered as an alternative to ABS
29	svic	Refer to graph	Manufacturers should continue to develop and introduce advanced (better) braking systems and other/supplementary sd utions, such as combined brake system and antilock-brake systems
30	ΤÜV	Refer to graph	Supplementary solutions could be: Active automobile light; Airbags for motorcycles, special clothing for motorcycle riders, motorcycle restraint system

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Refer to graph	All technical safety systems that ensures driving stability can be useful
2	Confederation Suisse	Refer to graph	Stability control system could be useful. For light weight motorcycles coupled brake would be more useful than ABS
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	No comment	
5	Hungary	No comment	
6	Innenministerium Mecklenburg-Vorpommern	Refer to graph	Improvement of road infrastructure/safety equipment, awamess compaigns
7	Ministry for the Environment The Netherlands	No comment	
8	RDW Netherlands	Refer to graph	New developments should be left to the market
9	Road Safety and Transport Agency, DK	Refer to graph	Additional front and rear integrated braking would be beneficial
10	The Italian Ministry of Infrastructure and Transport	Refer to graph	Due to the advanced status of technical progress reflected by the recent amendments of UNECE R-78 and correspondent GTR n.3, I. believes this topic should only be discussed in those fora
11	UK Department for transport	Refer to graph	Potential for alternative solutions, voluntary commitments or consumer awareness should be explored

**Table 7:** Classification table with replies to question #7.

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

## Associations and Companies

disses.    Apricultural Engineers Association (AEA)   Focusible (+)	#	Respondent Name	Reply	Comment
## A PECC   No comment	1	ACEM	Unfavourable	under chapter 7 of the Directive 97/24/EC. ACEMfurther disagree on extending the scope of the existing regulation to other
Aprilative Bradense Association (AEA) Excussible (+) Sourcest Sourcest (	2	ADAC	No comment	
5 Secretarian Products (BRP) No comment 7 Bosch 8 Dentage Recent or Products (BRP) No comment 9 Dental No comment 11 Delan No comment 12 Delan No comment 13 Error No comment 14 Delan Products (PRP) No comment 15 Delan Products (PRP) No comment 16 Delan No comment 17 Products (PRP) No comment 18 Delan Products (PRP) No comment 19 Delan No comment 19 Delan No comment 19 Delan Products (PRP) No comment 10 Delan Products (PRP) No comment 11 Delan Products (PRP) No comment 12 Delan Products (PRP) No comment 13 Delan Products (PRP) No comment 14 Delan Products (PRP) No comment 15 Delan Products (PRP) No comment 16 Delan Products (PRP) No comment 17 Delan Products (PRP) No comment 18 Delan Products (PRP) No comment 19 Delan Transport Safety Council (ETSC) Provided (PRP) No comment 19 Delan Transport Safety Council (ETSC) Provided (PRP) No comment 19 Delan Transport Safety Council (ETSC) Provided (PRP) No comment 19 Delan Transport Safety (Provided (PRP) No comment 19 Delan Transport	3	AECC	No comment	
5 Sections Only Section Child Section Child Section No comment 5 Bosch No comment 6 Bosch No comment 7 Bosch No comment 8 Bosch No comment 9 Bosch	4	Agricultural Engineers Association (AEA)	Favourable (+)	
Pack   No comment   The BMF has no garnel opposition to the measures proposed provided they remain applied to small opposity/motorcycles	5		No comment	
The BMF has no general apposition to the measures proposed provided flay meman applied to small capacity motorcycles Any extension of these measures to larger capacity motorcycles would have no advantage to either the industry or the consumer.  Personal No comment  Delay Roumble (+)  ESUAL Relatively Favourable  Surcourable (+)  Estra Favourable (+)  Estra Favourable (+)  Estra Favourable (+)  European Association of ATV Manufacturers (ATVEA)  The FIA is in favour of improved arti-tempering measures. Additional measures in the area of electronics seem to be breated at Alfrough at No seement entirely lead to charge so the machines by the user an introduced ATVEA apports a definition which suitable for he use of the ATVs and does not intrins the power of the vehicles. ATVEA seems no need for art tampering which is suitable for he use of the ATVs and does not limit the power of the vehicles. ATVEA seems no need for art tampering only make series or need containing the assessment of whickes in expect of surposing during her on spot respection by Palloc differs. Other measures in the area of electronics seem to be considered in the capacity of the use of the ATVs and does not limit the power of the vehicles. ATVEA seems no need for art tampering only make series or need of the account of the ATVs and does not limit the power of the vehicles. ATVEA seems no need for art tampering only make series or need of the account of the ATVs and does not limit the power of the vehicles. ATVEA seems no need for art tampering only make series or need of the ATVs and does not limit the power of the vehicles. ATVEA seems no need for art tampering only make series or need of the account of the	6	Bombardier Recreational Products (BRP)	No comment	
British Mataroydists Federation	7	Bosch	No comment	
Detra Favourable (+)  EQUAL Relatively Execurable (-)  EQUAL Relatively Execurable (-)  ETRA Favourable (-)  European Secretary Secretar	8	British Motorcyclists Federation	Unfavourable	, , , , , , , , , , , , , , , , , , , ,
Delira Favourable (+)  12 EQUAL Relatively Favourable (+)  13 ETRA Favourable (+)  14 Eurodies  15 European (FIA)  16 European Association of ATV Menufacturers (ATVEA)  17 European Association of ATV Menufacturers (ATVEA)  18 European Transport Safety Council (ETSC)  19 Federando  10 Neutral  10 Federando  10 Neutral  10 Federando  11 Neutral  12 European Transport Safety Council (ETSC)  13 Federando  14 European Transport Safety Council (ETSC)  15 European Transport Safety Council (ETSC)  16 European Transport Safety Council (ETSC)  17 European Transport Safety Council (ETSC)  18 Federando  19 Federando  19 Federando  10 Neutral  10 Federando  10 Neutral  11 Federando  12 ErFMC  13 ErFMC  14 ErFMC  15 European Transport Safety Council (EVR)  15 Federando  16 Federando  17 European Transport Safety Council (EVR)  18 Federando  19 Federando  10 Neutral  10 Neutral  11 Federando  12 German Insurance Association  13 Neutral  14 No comment  15 European Transport Safety Council (ETSC)  15 Federando  16 Federando  17 Neutral  18 Federando  18 Federando  19 Federando  19 Federando  10 Neutral  10 Hermandosiago are or one accompanied by regular random spot checks performed by well-trained efficers. ETSC suggests introduced and sociated. Find supports of the profice officers. Other accesses scalabilistically the assessment of vehicles in respect of ampeting during their or spot inspections by Police officers. Other accesses scalabilistically the assessment of vehicles in respect of the proficer officers. Other accesses scalabilistically the assessment of vehicles in respect on the proficer of the foreign of the different profit of the European Debetter and vehicles in English of the Search of the Accesses measures should be defearly defined  19 Federando  10 Federando  10 Federando  11 Hermandosity of the federandoment of the European Debetter of the Content of the European Debetter of the European Deb	9	Clepa	No comment	
EURA	10	Continental	No comment	
ETRA Favourable (+)  Europuncil of the Fédération Internationale de Europuncil of the Fédération Internationale de Favourable (+)  European Association of ATV Manufacturers (ATVEA)  Unifavourable  European Transport Safety Council (ETSC)  Favourable (+)  Favourable (+)  Favourable (+)  Favourable (+)  Favourable (+)  Favourable (+)  Favourable (-)  Favourabl	11	Dekra	Favourable (+)	
Europan Association of ATV Manufacturers (ATVEA)  Life Evolution of the Fédération Internationale de Paucurable (+)  European Association of ATV Manufacturers (ATVEA)  Life Evolution of the Life Evolution o	12	EQUAL	Relatively Favourable	
European Association of ATV Manufacturers (ATVEA)  European Transport Safety Council (ETSC)  European Transport Safety Council (ETSC)  Favourable (+)  Favourable (+)  Favourable (+)  Favourable (-)  European Transport Safety Council (ETSC)  Favourable (+)  Favourable (-)  Favourable (-)  Favourable (-)  European Transport Safety Council (ETSC)  Favourable (-)  Favourable	13	ETRA	Favourable (+)	
16 European Association of ATV Manufacturers (ATVEA)  17 European Transport Safety Council (ETSC)  18 Fédération Internationale de Motocyclisme (FIM)  19 Federmoto  19 Federmoto  19 Federmoto  10 Infravourable  10 Infravourable  11 PEMA  12 European Transport Safety Council (ETSC)  10 No comment  21 FEMC  22 German Road Safety Council (DVR)  23 Sefawar Council (DVR)  24 STO  25 Shrader Electrorics Ltd  26 SMC  27 Schrader Electrorics Ltd  28 SEGWAY INC.  19 Infravourable  10 Infravourable  11 Serious of the view that physical measures aimed at reducing tampering of vehicles, as those proposed by the TUV, would not work only make series on excompanied by regular random spot checks performed by well-trained officers. ETSC suggests introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles shortless introducing a common European labelling system of the different parts of vehicles affected and selected only well-trained officers. ETSC suggests introducing a common European labelling system of the different parts in the power of the vehicles in the federation of the different parts of	14	Eurodities	No comment	
Although ATVs are presently not subject to any anti-tampering measures, ATVEA would like to avoid that artificial restrictions that inevitably lead to changes to the machines by the user are introduced ATVEA supports a definition which is suitable for the use of the ATVs and does not limit the power of the vehicles. ATVEA sees no need for artificance and introduced ATVEA supports a definition which is suitable for the use of the ATVs and does not limit the power of the vehicles. ATVEA sees no need for artificance are researched by the power of the vehicles. ATVEA sees no need for artificance and the authority only make sense once accompanied by regular random spot checks performed by well-trained officers. ETSC suggests introducing a common temporal labelling system of the different parts of vehicles calcilating the assessment of vehicles in respect of lampering during their on spot inspections by Police officers. Other measures lacilitating on the spot inspection should be further developed and applied.  Fédération Internationale de Molocyclisme (FIM)  Neutral  Federmiclo  Neutral  The methodology and procedures of the chosen measure should be clearly defined  FEMA  Unfavourable  The methodology and procedures of the chosen measure should be clearly defined  FEMA supports the user's rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  Unfavourable  Unfavourable	15		Favourable (+)	· · · · ·
European Transport Safety Council (ETSC)  Favourable (+)  analysis series once accompanied by regular random spot checks performed by well-trained officers.ETSC suggests introducing a common European labelling system of the different parts of vehicles in respect of tampening during their on spot inspection by Police officers. Other measures facilitating on the spot inspections should be further developed and applied.  Federation Internationale de Motocyclisme (FIM)  Neutral  Neutral  Neutral  Neutral  Neutral  The methodology and procedures of the chosen measures should be clearly defined  FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  Ulrfavourable  The methodology and procedures of the chosen measure should be clearly defined  FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  Ulrfavourable  Ulrfavourable  The methodology and procedures of the chosen measure should be clearly defined  FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  Users shall be able to modify and costumize their motorcycles  German Road Safety Council (DVR)  No comment  Supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C.D.&.and 4 wheeler vehicles)  JAMA agrees the anti-tampering measures for L1 vehicles. JAMA does not support the TÜV conclusion to extend the scop of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification  No comment  SEGMAY INC.  No comment  Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	16		Unfavourable	restrictions that inevitably lead to changes to the machines by the user are introduced ATVEA supports a definition which is suitable for the use of the ATVs and does not limit the power of the vehicles. ATVEA sees no need for anti tampering measures
Find supports enforcement of the current anti-tampering rules in relation to the L1 category. According to FIM, no need to extend anti-tampering to other PTWs.  The methodology and procedures of the chosen measure should be clearly defined  FEMA Unfavourable  FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  Users shall be able to modify and costumize their motorcycles  German Road Safety Council (DVR)  No comment  GTÜ  No comment  Supports the implementation of new tempering measures if this regulation is applied to all categories (A,B,C,D&3and 4 wheeler vehicles)  Jama Europe  Unfavourable  Unfavourable  Unfavourable  Unfavourable  Unfavourable  Modifications on motorcycles that don't compromise safety and impact on the environment stould be allowed in the future.	17	European Transport Safety Council (ETSC)	Favourable (+)	only make sense once accompanied by regular random spot checks performed by well-trained officers.ETSC suggests introducing a common European labelling system of the different parts of vehides facilitating the assessment of vehicles in respect of tampering during their on spot inspections by Police officers. Other measures facilitating on the spot inspections
FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment  1 FFMC 1 Unfavourable 2 German Insurance Association 3 Cerman Road Safety Council (DVR) 4 GTÜ 5 Instituto Nacional de Teorica Aerospacial 5 Favourable 6 Favourable 7 Schrader Electronics Ltd 7 Schrader Electronics Ltd 7 No comment 7 SegWAY INC. 8 FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the environment 9 Unfavourable 9 SMC 9 FEMA supports the users' rights to make modifications to their motorcycles providing they do not compromise their safety and impact on the implementation of new tempering measures from the representation of new tempering measures if this regulation is applied to all categories (A.B.C.)D&3and 4 wheeler vehicles) 9 Jama Europe 9 Unfavourable 9 Unfavourable 9 SEGWAY INC. 9 No comment 9 Outprovides that don't compromise safety and impact on the environment should be allowed in the future. 9 SMC 9 Unfavourable 9 SMC 9 Unfavourable 9 Unfavourable 9 Outprovides that don't compromise safety and impact on the environment should be allowed in the future.	18	Fédération Internationale de Motocyclisme (FIM)	Neutral	FIM supports enforcement of the current anti-tampering rules in relation to the L1 category. According to FIM, no need to
20 FEMA Urfavourable and impact on the environment 21 FFMC Urfavourable Users shall be able to modify and costumize their motorcycles 22 German Road Safety Council (DVR) No comment 23 German Road Safety Council (DVR) No comment 24 GTÜ No comment 25 Instituto Nacional de Tecnica Aerospacial Favourable (+) supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C.D&3and 4 wheeler vehicles)  26 Jama Europe Urfavourable Urfavourable JAMA agrees the anti-tampering measures for L1 vehicles. JAMA does not support the TÜV conclusion to extend the scop of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification 27 Schrader Electronics Ltd No comment 28 SEGWAY INC. No comment 29 SMC Urfavourable Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	19	Federmoto	Neutral	The methodology and procedures of the chosen measure should be clearly defined
21 FFMC Urfavourable Users shall be able to modify and costumize their motorcycles  22 German Insurance Association No comment  23 German Road Safety Council (DVR) No comment  24 GTÜ No comment  25 Instituto Nacional de Tecnica Aerospacial Favourable (+) Supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C.D.8.3 and 4 wheeler vehicles)  26 Jama Europe Urfavourable Urfavourable of the anti-tampering measures for L1 vehicles. JAMA does not support the TÜV conclusion to extend the scop of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification  27 Schrader Electronics Ltd No comment  28 SEGWAY INC. No comment  29 SMC Urfavourable Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	20	FEWA	Unfavourable	
23 German Road Safety Council (DVR) No comment 24 GTÜ No comment 25 Instituto Nacional de Teorica Aerospacial Favourable (+) supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C.D&3and 4 wheeler vehicles)  26 Jama Europe Unfavourable JAWA agrees the anti-tampering measures for L1 vehicles. JAWA does not support the TÜV conclusion to extend the scop of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification 27 Schrader Electronics Ltd No comment 28 SEGWAY INC. No comment 29 SMC Unfavourable Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	21	FFMC	Unfavourable	Users shall be able to modify and costumize their motorcycles
24 GTÜ No comment  25 Instituto Nacional de Tecnica Aerospacial Favourable (+) supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C., D&3and 4 wheeler vehicles)  26 Jama Europe  Unfavourable  Unfavourable  Unfavourable  Vo comment  27 Schrader Electronics Ltd  No comment  28 SEGWAY INC.  No comment  29 SMC  Unfavourable  Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	22	German Insurance Association	No comment	
Supports the implementation of new tempering measures if this regulation is applied to all categories (A.B.C.D&3and 4 wheeler vehicles)    Jama Europe	23	German Road Safety Council (DVR)	No comment	
wheeler vehicles)  26 Jama Europe  Unfavourable  Unfavourable  Unfavourable  Unfavourable  Unfavourable  Unfavourable  Voluments to other categories of vehicles as there is no need and no safety justification  27 Schrader Electronics Ltd  No comment  28 SEGWAY INC.  No comment  Unfavourable  Unfavourable  Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	24	GTÜ	No comment	
26 Jama Europe Unfavourable of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification  27 Schrader Electronics Ltd No comment  28 SEGWAY INC. No comment  29 SMC Unfavourable Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	25	Instituto Nacional de Tecnica Aerospacial	Favourable (+)	
28 SEGWAY INC.  No comment  29 SMC  Unfavourable  Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	26	Jama Europe	Unfavourable	JAMA agrees the anti-tampering measures for L1 vehicles. JAMA does not support the TÜV conclusion to extend the scape of the anti-tampering requirements to other categories of vehicles as there is no need and no safety justification
29 SMC Unfavourable Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.	27		No comment	
	28	SEGWAY INC.	No comment	
30 TTV Eavourable (+) TTVV is basically agree with the study. However, TTVV is calling for an undate of the tests	29	SMC	Unfavourable	Modifications on motorcycles that don't compromise safety and impact on the environment should be allowed in the future.
	30	TÜV	Favourable (+)	TÜV is basicaly agree with the study. However, TÜV is calling for an update of the tests.

Public A	uthorities		
#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable (+)	The results of TÜV study should be taken into account
2	Confederation Suisse	Neutral	In pinciple supports the suggested AT measures from TÜV and those from the french proposal. However, not having been involved into the whole discussion, no concrete positoon towards those specific measures
3	Elspeth Attwooll MEP	Unfavourable	A fear is that rather than break the law, most riders would delay essential maintenance until absolutely necessary, which may cause accidents.
4	German Federal Government	Neutral	Interesting but not scientifically proved yet, electronic manipulation/grid change should be taken into account
5	Hungary	Unfavourable	Does not support every anti-tampering measure reliably preventing the manipulation of the vehicles
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Neutral	In the Netherlands there is no consensus amongst stakeholders on this subject. Anti tampering measures are however considered important
8	RDW Netherlands	Unfavourable	Mopeds do have a design speed limit and are rightly subjected to anti tampering measures. However extending the scope of anti tampering measures to categories other than those already regulated is not a good idea.
9	Road Safety and Transport Agency, DK	Favourable (+)	Denmark supports additional anti-tampering measures
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	TUV study is quite outdated (2003) and based on a small portion of motorcycles conforming to 97/24/EC Chapter 7 prescriptions. TUV study did not find a correlation between tampering and power increase, nor emissions deterioration, nor accident risk increas. Concerning document mowg_05_06.pdf, it shall be noted that many quite restrictive prescriptions are proposed without any scientific evidence justifying the need for new regulation, also there is a lack of impact assessment about the expected benefits.
11	UK Department for transport	Unfavourable	Sceptical of the benefit of current anti-tampering measures. Sees no justification for extention to higher performance machines which are not associated with driving licence restrictions.

 Table 8: Classification table with replies to question #8.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Refer to graph	ACEM believes that additional anti-tampering measures, for L1 category vehicles only, would bring road safety benefits. The measures proposed by ACEM cover the electronic devices controlling the vehicle's maximum speed, the inter-changeability of components, the CVT components, the exhaust silencing system and marking.
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Refer to graph	AEA is active producing standards in CEN/TC 354 and this route should enhance the machine/vehicle safety.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Refer to graph	No
12	EQUAL	Refer to graph	The reglementation 97/24/CE chapter 7 does not apply to this category
13	ETRA	Refer to graph	ETRA supports ACEM view that there is room for additional anti-tampering measures for L1 category vehicles. These additional measures should cover the electrical/electronical devices, which limit the vehicle's maximum speed, the interchangeability of components, the CVT components, the exhaust silencing system and marking.
14	Eurocities	No comment	
15	Eurocoun al of the Fédération Internationale de l'Automobile (FIA)	Refer to graph	The interface and function of the OBD should be specified
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	Europe an Transport Safety Council (ETSC)	Refer to graph	Reinforcement of random spot checks performed by well trained officers. A fair treatment to all road users in respect to the regulations is needed
18	Fédération Internationale de Motocyclisme (FIM)	Refer to graph	FIM supports enforcement of the current anti-tampering rules in relation to the L1 category. According to FIM, no need to extend anti-tampering to other PTWs.
19	Federmoto	Refer to graph	The methodology and procedures of the chosen measure should be clearly defined
20	FEMA	Refer to graph	opposes such regulations where restrictions are placed on an individual's ability to modify motorcycles
21	FFMC	Refer to graph	The human factor plays a major role in accidents involving motorcycles
22	German Insurance Association	Neutral	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Refer to graph	Technical control of vehicles in use provided that is applied by local authorities
26	Jama Europe	Refer to graph	No other technical measures are needed
27	Schrader Electronics Ltd	No comment	_
28	SEGWAY INC.	Refer to graph	
29	SMC	Refer to graph	SMC supports the application of type-approval regulations which help to remove barriers to trade, but opposes such regulations where restrictions are placed on an individual's ability to modify motorcycles.national single vehicle approval which allows the approval of one-off specials, vehicles from limited production and those built for non-EU markets.
30	TÜV	Refer to graph	TÜV encourages the introduction of periodical technical Inspections

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Refer to graph	Measures comparable those related to Article 29 Paragraph 1 from directive 2007/46/EG should be applied (if measures from article 30 Paragraph. 3 or 4 remain unsuccesseful)
2	Confederation Suisse	Refer to graph	more technical roadside inspections on the legal conformity of motorcycles
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	No comment	
5	Hungary	No comment	
6	Innenministerium Mecklenburg-Vorpommern	Refer to graph	Training/Police
7	Ministry for the Environment The Netherlands	Refer to graph	The Netherlands believes that additional anti-tampering measures would bring road safety and environmental benefits
8	RDW Netherlands	Refer to graph	
9	Road Safety and Transport Agency, DK	No comment	
10	The Italian Ministry of Infrastructure and Transport	Refer to graph	Supports the reinforcement of roadside checks and enforcement of "Road traffic regulation"
11	UK Department for transport	Refer to graph	Has not considered alternative solutions yet

Table 9: Classification table with replies to question #9

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	ACEM supports the repeal of the maximum power limit option left to the Member States, as this provision never demonstrated any positive effect where it has been implemented, and is not supported by scientific information.
2	ADAC	Unfavourable	No No
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Neutral	It is evident that harmonisation is not applicable to road conditions in all member states and is needs to be.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Unfavourable	Not favourable
7	Bosch	No comment	
8	British Motorcyclists Federation	Unfavourable	No.against this restrictive measure
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Unfavourable	The restriction to limit the maximum power to 74 kW is not necessary
12	EQUAL	No comment	
13	ETRA	Unfavourable	
14	Eurocities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	The relationship between power and accident frequency is not proved.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	Unfavourable	No, because of no concrete evidence showing the linkage between speed and high accident risks-Technical and cost-benefit aspects of speed limiters and Intelligent Speed Adaptation (ISA) should be taken into account by the current proposal.
18	Fédération Internationale de Motocyclisme (FIM)	Unfavourable	In scientific literature, potential top speed and power is not identified as a significant factor causing accidents.
19	Federmoto	Unfavourable	
20	FEMA	Unfavourable	FEMA's position is that it opposes the introduction of power limits for motorcycles and therefore rejects all the options considered.
21	FFMC	Unfavourable	
22	German Insurance Association	Favourable	Yes, but the limits would have to be discussed
23	German Road Safety Council (DVR)	Unfavourable	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Unfavourable	
26	Jama Europe	Unfavourable	This option should be repealed
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	No answer
29	SMC	Unfavourable	There is no indication of a relationship between accident risk and motorcycle engine size/effect
30	TÜV	Unfavourable	No, because of no concrete evidence showing the linkage between both factors

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable	
2	Confederation Suisse	Favourable	The power if motorcycles at 74 kW should be mandatory for all member states
3	Elspeth Attwooll MEP	Unfavourable	
4	German Federal Government	Unfavourable	
5	Hungary	Favourable	
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Neutral	In The Netherlands there is no consensus amongst stakeholders on this subject.
8	RDW Netherlands	Unfavourable	That option should be deleted
9	Road Safety and Transport Agency, DK	Favourable	Yes, due to traffic safety considerations
10	The Italian Ministry of Infrastructure and Transport		does not support the 74kW limit cause accident statistics indicates there is no correlation between vehicle's design power
10			and fatality risk
11	UK Department for transport		Member states should continue to be permitted to limit engine power on a national basis.do not support the introduction of a
- "			blanket limit imposed on all Member States.

**Table 10:** Classification table with replies to question #10.

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?

#### Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	ACEM supports the repeal of the maximum power limit option left to the Member States, as this provision never demonstrated any positive effect where it has been implemented, and is not supported by scientific information.
2	ADAC	Unfavourable	demonstrated any positive cheek whole triads been implemented, and is not supported by solentino mattern.
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Neutral	It is evident that harmonisation is not applicable to road conditions in all member states and is needs to be.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Unfavourable	
7	Bosch	No comment	
8	British Motorcyclists Federation	Unfavourable	No.against this restrictive measure
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Unfavourable	The restriction to limit the maximum power to 74 kW is not necessary
12	EQUAL	No comment	
13	ETRA	Unfavourable	
14	Eurocities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	The relationship between power and accident frequency is not proved.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	Unfavourable	No, because of no concrete evidence showing the linkage between speed and high accident risks-Technical and cost-benefit aspects of speed limiters and Intelligent Speed Adaptation (ISA) should be taken into account by the current proposal.
18	Fédération Internationale de Motocyclisme (FIM)	Unfavourable	In scientific literature, potential top speed and power is not identified as a significant factor causing accidents.
19	Federmoto	Unfavourable	No, because the limits haave not contributed to more safety so far
20	FEMA	Unfavourable	FEMA's position is that it opposes the introduction of power limits for motorcycles and therefore rejects all the options considered.
21	FFMC	Unfavourable	
22	German Insurance Association	Favourable	Yes, but the limits would have to be discussed
23	German Road Safety Council (DVR)	Unfavourable	
24	στΰ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Unfavourable	
26	Jama Europe	Unfavourable	This option should be repealed
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	Unfavourable	There is no indication of a relationship between accident risk and motorcycle engine size/effect
30	TÜV	Unfavourable	No, because of no concrete evidence showing the linkage between both factors

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable	
2	Confederation Suisse	Favourable	The power if motorcycles at 74 kW should be mandatory for all member states
3	Elspeth Attwooll MEP	Unfavourable	
4	German Federal Government	Unfavourable	
5	Hungary	Favourable	
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Neutral	In The Netherlands there is no consensus amongst stakeholders on this subject.
8	RDW Netherlands	Unfavourable	That option should be deleted
9	Road Safety and Transport Agency, DK	Favourable	Yes, due to traffic safety considerations
10	The Italian Ministry of Infrastructure and Transport	Unravourable	does not support the 74kW limit cause accident statistics indicates there is no correlation between vehicle's design power and fatality risk
11	UK Department for transport		Member states should confinue to be permitted to limit engine power on a national basis.do not support the introduction of a blanket limit imposed on all Member States.

**Table 11:** Classification table with replies to question #11.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	Unfavourable	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Unfavourable	No. Localised should not be penalised. L7-used in more countries so the legislation should be reviewed.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Favourable	
12	EQUAL	Favourable	
13	ETRA	No comment	
14	Eurocities	Favourable	According to Eurocities, Europe represents a big part of the market; Limits used in Europe will be be applied by the rest of the world
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	A EU regulation does not seem justified
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	Relatively Favourable	ETSC is of the view, that all motorised vehicles allowed on public roads should be type-approved. In the case of L6 and L7 quadricycles, however, the EU action may well not be essential, given their limited geographical spread.
18	Fédération Internationale de Motocyclisme (FIM)	No comment	
19	Federmoto	Relatively Favourable	
20	FEMA	Relatively Favourable	Concerns regarding the inclusion of these "vehicles" in accident statistics in some EU Member States statistics through licence requirements that includes them as a variant of the motorcycle.
21	FFMC	No comment	
22	German Insurance Association	Favourable	Yes, regulation on this type of vehicle is justified.
23	German Road Safety Council (DVR)	Favourable	Yes, the demand for enviromentally and economically friendly cars is likely to increase in the future
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Favourable	Yes, the market could change
26	Jama Europe	No comment	
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	No comment	No answer. One comment: SMC would like to see the quads registered as something else than motorcycles in the statistics
30	ΤÜV	Favourable	

	STO / MATOR MOD			
#	Respondent Name	Reply	Comment	
1	Baden-Württemberg, Ministry of the Interior	Favourable		
2	Confederation Suisse	Favourable		
3	Elspeth Attwooll MEP	No comment		
4	German Federal Government	Favourable	Yes, because of the internal market rules	
5	Hungary	Favourable	The regulation of these vehicles is justified on Community level, the requirements should be uniform.	
6	Innenministerium Mecklenburg-Vorpommern	No comment		
7	Ministry for the Environment The Netherlands	No comment		
8	RDW Netherlands	Unfavourable	RDW prefers national legislation for these vehicles.	
9	Road Safety and Transport Agency, DK		Denmark considers it unjustified to have EU-legislation for L6 and L7. If kept within the scope of Directive 2002/24, they should comply fitted with crash-safe steering mechanism in accordance with ECE regulation 12 or similar	
10	The Italian Ministry of Infrastructure and Transport	Favourable	supports to keep the EU legislation for quadricycles.	
11	UK Department for transport	Favourable		

 Table 12: : Classification table with replies to question #12.

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?

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Unfavourable	No. A separate category should be introduced
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Favourable	Yes, safety requirements (mass/passenger requirements) specific to this category of vehicles should be clearly defined
12	EQUAL	Favourable	
13	ETRA	No comment	
14	Eurocities	No comment	
15	Eurocoun cil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	Crash safety requirements (less strict than for passenger cars) should be introduced
16	, ,	No comment	
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	No comment	
19	Federmoto	Favourable	Yes, they need to meet the safety requirements applying to cars
20	FEMA	No comment	
21	FFMC	No comment	
22	German Insurance Association	Favourable	If a vehicle participates in road traffic, safety relevant points have to be considered. Especially light weight motor vehicles with their passenger-car-like appearance suggest that they also possess the safety characteristics of passenger cars
23	German Road Safety Council (DVR)	Favourable	Yes, they need to meet the safety requirements applying to cars
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Favourable	strongly supports not to limit the unladen mass but the mass in running order. Otherwise, would support the application of car requirements
26	Jama Europe	No comment	
27	Schrader Electronics Ltd	No comment	
28	SEG WAY INC.	No comment	
29	SMC	No comment	One comment: SMC would like to see the quads registered as something else than motorcycles in the statistics
30	ΤÜV	Unfavourable	These vehicles cannot meet the same safety requirements applying to cars because of their construction design. Therefore, measures such as anti-tempering and speed limitation should be introduced

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable	Stricter limitations regarding the mass in running order are welcome
2	Confederation Suisse	Favourable	such vehicles should comply as much as possible with car requirements
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Favourable	Such vehicles should comply as much as possible with car requirements
5	Hungary	Favourable	Supports the introduction of stricter requirements for these vehicles
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Min is try for the Environment The Netherlands		Since they are mostly used as an alternative to cars, N. sees no reason why requirements on safety and environment should be more lenient than those for cars.
8	RDW Netherlands	Favourable	The mass limitation were better to refer to the mass in running order instead of the unladen mass
9	Road Safety and Transport Agency, DK	Favourable	Stricter limitations will be welcome
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	Against similar safety requirements applying to cars
11	UK Department for transport	Unfavourable	Introduction of proportionate requirements to ensure the minimum safety performance of these vehicles

**Table 13:** Classification table with replies to question #13.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	Favourable	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Favourable	A new category should be introduced
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Favourable	BRP believes ATV should be in the scope of the current type-approval system. BRP supports the creation of a specific and well defined category for ATVs next to the quadricycle category
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Favourable	
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable	
16	European Association of ATV Manufacturers (ATVEA)	Favourable	
17	European Transport Safety Council (ETSC)	Favourable	If these vehicles should continue to be allowed on public roads, vehicle type approval regulations should be considered for them as well, including requirements on pedestrians' protection
18	Fédération Internationale de Motocyclisme (FIM)	Favourable	FIM supports ATVEA's proposal for a new category to cover ATVs
19	Federmoto	No comment	
20	FEMA	No comment	
21	FFMC	No comment	
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Unfavourable	favourable for the exclusion of this type of vehicles from the WVTA and for a clear definition of off road quads
26	Jama Europe	No comment	
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	No comment	SMC would like to see the quads registered as something else than motorcycles in the statistics
30	TÜV	Favourable	Yes. As long as there is no concrete definition of Off-Road quads, there is no reason to exclude these vehicles from the scope of type-approval.

Public At	DICAUTORITIES				
#	Respondent Name	Reply	Comment		
1	Baden-Württemberg, Ministry of the Interior	Favourable			
2	Confederation Suisse	Unfavourable	The original aim of these vehicles was the off-road use. Therefore, the presprictions for such vehicles should be modified and adapted to follow much more the principles of forestry and agricultural tractors		
3	Elspeth Attwooll MEP	No comment			
4	German Federal Government	Favourable			
5	Hungary	Unfavourable	No. The category is not adapted to the design of these vehicles. Their usage, purpose is different.		
6	Innenministerium Mecklenburg-Vorpommern	Favourable	They should be in the scope of type-approval adapted to their special requirements.		
7	Ministry for the Environment The Netherlands	No comment			
8	RDW Netherlands	Unfavourable	Off-road squads should not be in the scope of 2002/24/EC		
9	Road Safety and Transport Agency, DK	No comment			
10	The Italian Ministry of Infrastructure and Transport	Favourable	L7 vehicles can be designed for on-road use and therefore specific legislation is needed to allow the access to public roads of these vehicles.		
11	UK Department for transport	Unfavourable	Off-road quadricycles are not suited for use on public roads and should be removed from the scope of the Directive.Leisure type quadricycles may need to be used on public roads so there is potential justification in creating a new category to cover these vehicles approval to requirements similar to those applied to the T3 tractor category in the agricultural vehicle framework directive be an appropriate route for quadricycles intended for agricultural use		

Table 14: Classification table with replies to question #14.

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?

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	Unfavourable	Safety measures must be reinforced
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Unfavourable	Quadricycles are placed in the incorrect area and need individual type approval so therefore require new separate legislation
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra		
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	There should be a higher orientation towards road traffic specific demands
16	European Association of ATV Manufacturers (ATVEA)	Unfavourable	Absolutely disagree.ATVs should be classified in a dedicated category so as to be clearly distinguished from motorcycles and microcars.
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Neutral	FIM supports ATVEA's proposal for a new category to cover ATVs
19	Federmoto	No comment	
20	FEMA	No comment	
21	FFMC	No comment	
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Unfavourable	
26	Jama Europe	No comment	
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	No comment	SMC would like to see the quads registered as something else than motorcycles in the statistics
30	TÜV	Unfavourable	A category for quads should be created

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Unfavourable	
2	Confederation Suisse	Unfavourable	No. EU legislation should be modified asap.
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	No comment	
5	Hungary	Unfavourable	No. The category is not adapted to the design of these vehicles. Their usage, purpose is different.
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Unfavourable	A stricter type approval would be appropriate for quads as off-road use can be more extreme and therefore requires corresponding safety, exhaust gas and noise emission regulation
8	RDW Netherlands	Unfavourable	Like for categories L6 and L7, most of the provisions are not drafted for off-road squads.
9	Road Safety and Transport Agency, DK	Unfavourable	
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	L7 category shall be better defined in order to clearly distinguish between L7 vehicles for public road use from off-road L7.
11	UK Department for transport	Unfavourable	There is a clear and urgent need to be able to distinguish the different categories of micro car, off-road quad, leisure quad, and agricultural quad, and for appropriate standards to be applied to the different designs.

Table 15: Classification table with replies to question #15

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

#### Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Favourable	Yes, but not specifically to improve safety, again the need to have an individual piece of legislation is evident
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Favourable	Maximum speed limit should be introduced
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	No comment	
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable	Provisions to reduce filt tendency and to mitigate injury risk during filting (rollover bar) should be taken into account.
16	European Association of ATV Manufacturers (ATVEA)	Unfavourable	No. The introduction of a specific category with a proper definition of what an ATV is would prevent unwanted effects from taking place and would be the best solution to increase safety. If these vehicles should continue to be allowed on public roads, vehicle type approval regulations should be considered for
17	European Transport Safety Council (ETSC)	Favourable	If these vehicles should continue to be allowed on public roads, vehicle type approval regulations should be considered for them as well, including requirements on pedestrians' protection
18	Fédération International e de Motocyclisme (FIM)	No comment	
19	Federmoto	No comment	
20	FEMA	No comment	
21	FFMC	No comment	
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Favourable	Yes, if WVTA accepted, news requirements such as anti tempering, emission cycles and limits, stability checks, hand holder should be implemented
26	Jama Europe	No comment	
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No Comment	
29	SMC	No comment	SMC would like to see the quads registered as something else than motorcycles in the statistics
30	TÜV	Favourable	Absolutely.Additional measures: A higher power limitation than 15kw should be introduced.

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Neutral	A new category to cover ATVs should be created
2	Confederation Suisse	Favourable	Pedestrian safety should be reinforced. Mandary requirement of a minimum ground clearence or a minimum vehicle height to improve the visibility of such vehicles
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Favourable	
5	Hungary	Favourable	Yes, in case these vehicles are allowed to circulate on the roads in certain conditions.
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	No comment	
8	RDW Netherlands	Favourable	When these vehicles are to be included in the scope of 2002/24/EC and categories L6 and L7 are kept in the scope, then the technical provisions should be improved
9	Road Safety and Transport Agency, DK	Relatively Favourable	If they are kept within EU-legislation, then yes
10	The Italian Ministry of Infrastructure and Transport	Relatively Favourable	It is likely that new specific requirements will be needed, but this can be assessed only after the new classification is completed.
11	UK Department for transport	Favourable	Yes. Open for any research to identify suitable requirements to ensure the safety of these vehicles

**Table 16:** Classification table with replies to question #16.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	ACEM think that EU legislation on hydrogen PTWs is not needed for the very next future. Prototypes could be individually type-approved at national level or subject to an exemption of 2002/24/EC
2	ADAC	Favourable	Yes, but in close cooperation with Industry
3	AECC	No Comment	
4	Agricultural Engineers Association (AEA)	Favourable	
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	No comment	
7	Bosch	No comment	
8	British Motorcyclists Federation	Unfavourable	BMF believes there is no reason yet to introduce further legislation as this may stifle innovation.
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Unfavourable	
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	Favourable	Yes to prevent unwanted and unnecessary developments; e.g. harmonisation in fuel stations is a must.
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Relatively Favourable	If industry is developing hydrogen vehicles, some legislation for their planning security are needed.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Unfavourable	FIM urges not to regulate this technology at an early stage. This may stifle innovation and delay conversion of PTWs to hydrogen
19	Federmoto	Unfavourable	because, the hydrogen technology technology has not been applied on motorcycles yet
20	FEMA	Neutral	On the one hand, small manufacturers might need an EU legislation to operate in.On the other hand, one could argue that manufacturers need less regulation to encourage innovation. Innovation and commonsense could dictate until there is large enough market to require regulation.
21	FFMC	No comment	
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	Favourable	
26	Jama Europe	Unfavourable	JAMA believes there is no need for any legislation on hydrogen vehicles just yet as this technology is still in its early phase of development.
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	No comment	
30	ΤÜV	Favourable	Yes. Legislation on vehicles with LPG-, CNG-, Hybrid- oder Electric engines are necessary

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable	a EU legislation on hydrogen seems to be necessery.
2	Confederation Suisse	Favourable	Yes, S. sees primilary need such a legislation for vehicle of categories M and N
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Favourable	
5	Hungary	Relatively favourable	From the emission point of H. accepts the hydrogen power. However, safety aspects need to be taken account as well. The accident safety level of a motorcycle driven by any gas cannot reach the level of a car with the same fuel. By the time the safety level will be the same H. will support the EU regulation of hydrogen motorcycles
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Unfavourable	The Netherlands thinks that EU legislation on hydrogen PTWs is not needed for the very next future. Prototypes could be individually type-approved at national level or subject to an exemption of 2002/24/EC.
8	RDW Netherlands	Favourable	For L-category vehicles legislation is needed too, because there are presently some prototype motorcycles being constructed that use hydrogen as a fuel.
9	Road Safety and Transport Agency, DK	No comment	
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	At the present there is no need for EU legislation on hydrogen L vehicles
11	UK Department for transport	Favourable	

Table 17: Classification table with replies to question #17.

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 SMEs?

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Favourable	The simplification of the legislation would benefit all market players.
2	ADAC	No comment	
3	AECC	Favourable	Strong environmental legislation will have a positive impact on the competitiveness of the European vehicle manufacturing industry.
4	Agricultural Engineers Association (AEA)	Unfavourable	Not very impressive because many vehicles are assessed generally rather than specifically.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Unfavourable	Impact of the introduction of measures difficult to assess. However, BRP strongly believes that the introduction of more stringent emission and other requirements, in the current economic crisis, will have a serious impact on their activities in Europe, as well as on their suppliers, of which many are SMEs. Therefore, giving sufficient transition period will be crucial for manufacturers.
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Favourable	Positive impact on the completiveness of the EU Industry/Influence of EU Industry on foreign markets
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	Favourable	On the long term the range of measures will have minor effects on the competitiveness of SME's
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Favourable	The new regulations would improve the products therefore would strengthen the competitiveness of the EU industry
16	European Association of ATV Manufacturers (ATVEA)	Favourable	The possibility for ATVs to be homologated is a prerequisite for the existence of an ATV market in Europe.
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Favourable	Simplification of legislative procedures should benefit industry. Advancing technical standards placing the EU at the forefront worldwide should benefit EU industry.
19	Federmoto	No comment	
20	FEMA	No comment	
21	FFMC	Unfavourable	Negative impact on the final price and on small businesses
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	No comment	
26	Jama Europe	Unfavourable	Judging from the present economic condition (ex; reduction of PTWs sales volume), those big influences cannot be eliminated
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No Comment	
29	SMC	No Comment	
30	TÜV	Favourable	Positive impact on the comptetiveness of the EU Industry due to an incrasing consumer demand for environmentally friendly products and an assumed supportive fiscal policy

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	No comment	
2	Confederation Suisse	No comment	
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	No comment	
5	Hungary	No comment	
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Favourable	The simplification of the legislation would benefit all market players, including SME. In the current economic context, phasing in of environmental standards is furthermore necessary, as well as a market-aware approach to advanced braking systems. Together, these are the conditions for maintaining or developing the competiveness of the industry.
8	RDW Netherlands	No comment	
9	Road Safety and Transport Agency, DK	No comment	
10	The Italian Ministry of Infrastructure and Transport	Neutral	Most of the new measures would firmly impact on product cost and market, influencing employment rates also.
11	UK Department for transport	Neutral	Solid impact assessments need to be implemented before considering the introduction of the legislation. Manufacturers will need sufficient lead times to allow them to implement any changes that are necessary

Table 18: Classification table with replies to question #18.

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

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	Unfavourable	The blanket application of all the measures proposed in this consultation would provoke price increases far beyond market acceptance, resulting in severe drop of the demand, which would inevitably reduce employment in the PTW sector.
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Unfavourable	Added cost and potentially design restrictive.
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Unfavourable	BRP stress the serious implications of imposing stringent requirements that would demand technical and financial investments in the current difficult market conditions
7	Bosch	No comment	
8	British Motorcyclists Federation	No comment	
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Neutral	Increasing of development/production capcity in the European automotive industry. However, a large number of manufacturers are located in Asia.
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	Favourable	(+) More employment.
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Neutral	Needs of small manufactures should be taken into account in order to avoid negative impacts on employement
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Neutral	Due to the economic crisis; the implementation of measures must be taken in stages
19	Federmoto	No comment	
20	FEMA	No comment	
21	FFMC	Unfavourable	Negative impact on employement in small businesses
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	No comment	
25	Instituto Nacional de Tecnica Aerospacial	No comment	
26	Jama Europe	Unfavourable	It is predicted notionally that the influence by PTWs sales volume comes out.
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No Comment	
29	SMC	No Comment	
30	ΤÜV	Favourable	Positive impact on employement since new technologies (safety+environment) need to be developed by manufacturers and suppliers

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	Favourable	The impact of measures on the employment in the PTW sector is considered to be small, since market demand is the predominant factor. There may be some beneficial effect by encouraging the use of original parts from EU manufacturers
2	Confederation Suisse	No comment	
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	No Comment	
5	Hungary	No comment	
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	No comment	
8	RDW Netherlands	No comment	
9	Road Safety and Transport Agency, DK	No comment	
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	Most of the new measures would firmly impact on product cost and market, influencing employment rates also.
11	UK Department for transport	Neutral	Manufacturers will need sufficient lead times to allow them to implement any changes that are necessary

Table 19: Classification table with replies to question #19.

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?

## Associations and Companies

#	Respondent Name	Reply	Comment
1	ACEM	No comment	
2	ADAC	No comment	
3	AECC	No comment	
4	Agricultural Engineers Association (AEA)	Unfavourable	Yes
5	Associazione Onlus	No comment	
6	Bombardier Recreational Products (BRP)	Unfavourable	If the Commission will force a rapid change the cost could become so significant that this could impact final price. Regarding the price impact there are other parameters that could affect the final impact: acceptance of market to pay for emissions, the capacity of the market to pay more, the perceived value of the product versus price
7	Bosch	No comment	
8	British Motorcyclists Federation	Unfavourable	The measures proposed are likely to reduce the overall cost of compliance and design which are considerable costs in terms of small volume producers. However, mandatory ABS or other braking systems or even EU only power restrictions would undo any benefit and would probably even increase price beyond the current levels.
9	Clepa	No comment	
10	Continental	No comment	
11	Dekra	Unfavourable	Vehicle's costs will increase. However, on long term, follow-up costs will diminush
12	EQUAL	No comment	
13	ETRA	No comment	
14	Eurocities	Neutral	May be a little bit but this is negligible
15	Eurocouncil of the Fédération Internationale de l'Automobile (FIA)	Unfavourable	All the additional environment and safety measures would generate significant development costs, which would need to be transferred to the consumers as well as the additional component costs.
16	European Association of ATV Manufacturers (ATVEA)	No comment	
17	European Transport Safety Council (ETSC)	No comment	
18	Fédération Internationale de Motocyclisme (FIM)	Unfavourable	There is potential for massive price increases on small PTWs unless the correct technical advances are chosen, particularly in relation to braking
19	Federmoto	Unfavourable	Negative effect on the margin calculation, benefiting the suppliers
20	FEMA	Unfavourable	If new technologies such as advanced braking systems are made mandatory, this will most probably have an impact on the final price of the vehicle. The extra-cost of fitting of an ABS system – in particular for small motorcycle – is not negligible. In addition to that, complying with new Emissions standards and/or additional emissions measures might require the development of new technologies/vehicle modifications and hence also have an impact on the price
21	FFMC	Unfavourable	Negative impact on employement in small businesses and on final price
22	German Insurance Association	No comment	
23	German Road Safety Council (DVR)	No comment	
24	GTÜ	Unfavourable	If new technology such as advanced braking system are made mandatory, this will probably show in the final price of the motorcycle, especially the small ones.
25	Instituto Nacional de Tecnica Aerospacial	No comment	
26	Jama Europe		Yes it would have a significant impact on the final price of the vehicles . JAMA believes EU introduces reasonable measures based on the impact assessments to minimize the price increase
27	Schrader Electronics Ltd	No comment	
28	SEGWAY INC.	No comment	
29	SMC	No comment	
30	TÜV	Unfavourable	A slight impact on the final price of vehicles. Potential costs of reducing emissions may arise and be transferred to the consumer/

#	Respondent Name	Reply	Comment
1	Baden-Württemberg, Ministry of the Interior	No comment	
2	Confederation Suisse	No comment	
3	Elspeth Attwooll MEP	No comment	
4	German Federal Government	Neutral	Costs for manufactures and endprice for consumers will slightly increase
5	Hungary	No comment	
6	Innenministerium Mecklenburg-Vorpommern	No comment	
7	Ministry for the Environment The Netherlands	Neutral	There may be some price increase, but this will be borne by the market, and can be justified by the environmental and safety benefits.
8	RDW Netherlands	No comment	
9	Road Safety and Transport Agency, DK	No comment	
10	The Italian Ministry of Infrastructure and Transport	Unfavourable	Most of the new measures would firmly impact on product cost and market, influencing employment rates also.
11	UK Department for transport	Unfavourable	Introducing measures to improve the safety of micro cars would include significant costs to manufacturers if compliance with full passenger car requirements are introduced in an unrealistic time scale. Mandating ABS or other advanced safety measures is likely to impose disproportionate costs on smaller machines compared to larger ones.

**Table 20:** Classification table with replies to question #20.