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*****I**

REPORT

on the proposal for a European Parliament and Council directive amending
Directive 97/24/EC on certain components and characteristics of two or three-
wheel motor vehicles
(COM(2000) 314 – C5-0334/2000 – 2000/0136(COD))

Committee on the Environment, Public Health and Consumer Policy

Rapporteur: Bernd Lange

Symbols for procedures

- * Consultation procedure
majority of the votes cast
- **I Cooperation procedure (first reading)
majority of the votes cast
- **II Cooperation procedure (second reading)
majority of the votes cast, to approve the common position
majority of Parliament's component Members, to reject or amend
the common position
- *** Assent procedure
majority of Parliament's component Members except in cases
covered by Articles 105, 107, 161 and 300 of the EC Treaty and
Article 7 of the EU Treaty
- ***I Codecision procedure (first reading)
majority of the votes cast
- ***II Codecision procedure (second reading)
majority of the votes cast, to approve the common position
majority of Parliament's component Members, to reject or amend
the common position
- ***III Codecision procedure (third reading)
majority of the votes cast, to approve the joint text

(The type of procedure depends on the legal basis proposed by the Commission)

CONTENTS

	Page
PROCEDURAL PAGE	4
LEGISLATIVE PROPOSAL	5
EXPLANATORY STATEMENT	24
OPINION OF THE COMMITTEE ON REGIONAL POLICY, TRANSPORT AND TOURISM	29

PROCEDURAL PAGE

By letter of 22 June 2000 the Commission submitted to Parliament, pursuant to Article 251(2) and Article 95 of the EC Treaty, the proposal for a European Parliament and Council directive amending Directive 97/24/EC on certain components and characteristics of two or three-wheel motor vehicles (COM(2000) 314 - 2000/0136 (COD)).

At the sitting of 7 July 2000 the President of Parliament announced that she had referred this proposal to the Committee on the Environment, Public Health and Consumer Policy as the committee responsible and the Committee on Industry, External Trade, Research and Energy, the Committee on Legal Affairs and the Internal Market and the Committee on Regional Policy, Transport and Tourism for their opinions (C5-0334/2000).

The Committee on the Environment, Public Health and Consumer Policy appointed Bernd Lange rapporteur at its meeting of 12 July 2000.

The committee considered the Commission proposal and draft report at its meetings of 21 November and 23 January 2001.

At the last meeting it adopted the draft legislative resolution unanimously with 4 abstentions.

The following were present for the vote: Caroline Jackson, chairman; Guido Sacconi, vice-chairman; Bernd Lange, rapporteur; Per-Arne Arvidsson, Hans Blokland, David Robert Bowe, John Bowis, Martin Callanan, Dorette Corbey, Avril Doyle, Marialiese Flemming, Karl-Heinz Florenz, Cristina García-Orcóyen Tormo, Laura González Álvarez, Robert Goodwill, Françoise D. Grossetête, Mary Honeyball (for Carlos Lage), Anneli Hulthén, Christa Klaß, Eija-Riitta Anneli Korhola, Hans Kronberger, Torben Lund, Minerva Melpomeni Malliori, Jorge Moreira Da Silva, Rosemarie Müller, Riitta Myller, Giuseppe Nisticò, Karl Erik Olsson, Béatrice Patrie, Marit Paulsen, Frédérique Ries, Dagmar Roth-Behrendt, Jean Saint-Josse, Amalia Sartori (for Maria del Pilar Ayuso González), Karin Scheele, Jonas Sjöstedt, Dirk Sterckx, Catherine Stihler, Roseline Vachetta, Kathleen Van Brempt (for Marie-Noëlle Lienemann), Phillip Whitehead.

The opinion of the Committee on Regional Policy, Transport and Tourism is attached. The Committee on Industry, External Trade, Research and Energy decided on 13 September 2000 not to deliver an opinion. The Committee on Legal Affairs and the Internal Market decided on 17 October 2000 not to deliver an opinion.

The report was tabled on 24 January 2001.

The deadline for tabling amendments will be indicated in the draft agenda for the relevant part-session.

LEGISLATIVE PROPOSAL

Proposal for a European Parliament and Council directive amending Directive 97/24/EC on certain components and characteristics of two or three-wheel motor vehicles (COM)(2000) 314 – C5-0334/2000 – 2000/0136(COD))

The proposal is amended as follows:

Text proposed by the Commission ¹

Amendments by Parliament

(Amendment 1)

Recital 4a (new)

In the light of the special characteristics and use of certain well-known categories of vehicle such as off-road, enduro and trial motorcycles and having regard to their very small contribution to overall emissions, owing to the small number of vehicles sold each year in Europe (fewer than 13 000), it is considered acceptable, with regard to the entry into force of the new limits in 2003, to grant a temporary exemption in order to allow manufacturers to introduce the appropriate technology.

Justification:

In view of the very small impact of this kind of motorcycle on emissions overall and in view of their technical characteristics, manufacturers must be allowed time to bring their products into line with the new rules.

(Amendment 2)

Recital 6

(6) Tricycles and quadricycles are equipped either with spark ignition or compression ignition engines; in line with emission limits for passenger cars, each category requires a separate set of limit values.

(6) Tricycles and quadricycles are equipped either with spark ignition or compression ignition engines; in line with emission limits for passenger cars, each category requires a separate set of limit values. ***Particulate emission limit values must be laid down for vehicles with compression ignition (diesel) engines.***

¹ OJ C 337, 28.11.2000, p.140.

Justification:

Particulate emissions are a risk to human health. The EU has emphasised particulate emission limit values for all other types of diesel vehicle (passenger cars, LDVs, HDVs and off-road vehicles). It is therefore difficult to see why the Commission has not proposed particulate emission values here too.

(Amendment 3)

Recital 8

(8) Member States should be allowed, by way of tax incentives, to expedite the placing on the market of vehicles which satisfy the requirements adopted at Community level and to promote more environmentally advanced technologies on the basis of **permissive** emission values; such incentives should satisfy certain conditions intended to avoid distortions of the internal market; this Directive does not affect the Member States' right to include emissions of pollutants and other substances in the basis for calculating road traffic taxes on two and three-wheel vehicles.

(8) Member States should be allowed, by way of tax incentives, to expedite the placing on the market of vehicles which satisfy the requirements adopted at Community level and to promote more environmentally advanced technologies on the basis of **mandatory** emission values; such incentives should satisfy certain conditions intended to avoid distortions of the internal market; this Directive does not affect the Member States' right to include emissions of pollutants and other substances in the basis for calculating road traffic taxes on two and three-wheel vehicles.

Justification:

Mandatory limit values are required to provide a clear and unambiguous datum, to provide security for the product development of new engines and techniques and to avoid developments in the wrong direction. On the basis of mandatory limit values tax incentives may be introduced to get low-emission vehicles on the roads as soon as possible. Permissive values alone would be too uncertain for the initiation of new development, there would only be induced effects rather than new developments. Changing permissive values would produce a hotchpotch of approval requirements in the internal market. Clarity is needed, and manufacturers have to be given clear signals with tax incentives on the basis of mandatory values.

(Amendment 4)

Recital 8a (new)

(8a) Member States may take measures to encourage the retrofitting of older two or three-wheeled vehicles with emission-control devices and components.

Justification:

In the case of older two or three-wheeled vehicles in particular there must be incentives to re-equip them so that even older vehicles may be relatively simply brought up to EURO I two-wheel or EURO II two-wheel standards. The owners of older vehicles in particular should be given financial incentives to protect the environment, as they in particular often cannot afford to retrofit them.

(Amendment 5)

Recital 10

(10) It is necessary to establish a further stage of emission limits, comprising further substantial reductions with respect to the limit values for 2003; ***such limit values can be developed in detail only when the current test cycle has been revised and after further study of the technical feasibility and emission-reduction potential of the technology.***

(10) It is necessary to establish a further stage of ***mandatory*** emission limits ***with effect from 2006*** comprising further substantial reductions with respect to the limit values for 2003.

Justification:

Many motorcycles now being registered already meet the first stage limit values scheduled for 2003. So that current technology will not simply be set in stone a second stage with ambitious limit values for 2006 will be required. Only mandatory values will give the industry the certainty it needs to make its plans. This will provide a suitable lead time for the development of new engines and emission control technology which is certainly necessary as real progress will be made only with new technology.

(Amendment 6)

Recital 10a (new)

(10a) To ensure that emissions are reduced in practice, on-board diagnostics (OBD) systems should be introduced for all two or three-wheel vehicles with an engine capacity of over 150 cc from 1 January 2006, to permit the immediate detection of failure of anti-pollution vehicle devices or equipment and thus allowing a significant upgrading of the maintenance of initial emissions performance of in-service vehicles through better monitoring and maintenance.

In order to ensure compliance with emission limit values, from 1 January 2003 checks on compliance of in-service

two and three-wheel vehicles (in-service surveys) will be introduced.
Specific requirements for the durability of anti-pollution equipment during the normal life of two or three-wheel vehicles for a period of up to five years or until 30 000 km have been covered, whichever is the earlier, from 1 January 2003, and for a period of up to five years or until 50 000 km have been covered, whichever is the earlier, from 1 January 2006, shall be introduced.

Justification:

Without detracting from the importance of strict limit values, it is almost more essential to ensure that these standards are still complied with after thousands of kilometres in service. This is where the real scope for reducing emissions lies. When two or three-wheeled vehicles are type approved, requirements to this effect (durability requirements) for anti-pollution equipment needs to be laid down and verified in practice (in-service checks and on-board diagnostics). Experience with the directives for passenger cars, LDVs and HDVs could be drawn upon in this context.

(Amendment 7)
Recital 10b (new)

(10b) It must also be ensured that operating conditions of two and three-wheel vehicles in use correspond to the settings for the test cycle and that no defeat devices or other by-pass arrangements are used.

Justification:

It has to be ensured that the use of defeat devices which electronically disable the test cycle settings or special settings for the test cycle ('cycle-by-pass') is avoided as this would produce higher fuel consumption or emissions. Some individual vehicles are completely undrivable at the electronic settings used for the test cycle.

(Amendment 8 (new))
Recital 10c (new)

(10c) As two and three-wheel vehicles are producing an increasing proportion of total CO₂ emissions from transport sources, CO₂ emissions and the fuel consumption of two and three-wheel

vehicles need to be ascertained as soon as possible and incorporated in the Community strategy for reducing CO₂ emissions from road traffic.

Justification:

It is obvious that two and three-wheel vehicles need to be covered by the Community strategy for reducing CO₂ emissions produced by traffic. Some development work remains to be done, as there is no reason why a motor cycle with a mass of some 220 kg and carrying one person should have the same or greater fuel consumption and hence CO₂ emissions as a five-seater passenger car. The CO₂ value pursuant to Directive 93/116/EEC must therefore be ascertained for motor cycles of over 150 cc engine capacity in order to obtain comparable values. Another consideration is whether for example the Directive relating to consumer information on fuel economy and CO₂ emissions (Directive 1999/94/EC) should not be extended to two or three-wheel motor vehicles.

(Amendment 9)
Article 2(3)

With effect from 1 **January** 2004, Member States shall:

- consider certificates of conformity which accompany new vehicles pursuant to Directive 92/61/EEC as no longer valid, and
- refuse the registration, sale or entry into service of new vehicles which are not accompanied by a certificate of conformity in accordance with Directive 92/61/EEC,

on grounds relating to the measures to be taken against air pollution, if the vehicles fail to comply with the provisions of Directive 97/24/EC, as amended by this Directive.

For the type I test, the limit values set out in row A of the Table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive, shall be used.

With effect from 1 **July** 2004, Member States shall:

- consider certificates of conformity which accompany new vehicles pursuant to Directive 92/61/EEC as no longer valid, and
- refuse the registration, sale or entry into service of new vehicles which are not accompanied by a certificate of conformity in accordance with Directive 92/61/EEC,

on grounds relating to the measures to be taken against air pollution, if the vehicles fail to comply with the provisions of Directive 97/24/EC, as amended by this Directive.

For the type I test, the limit values set out in row A of the Table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive, shall be used.

For special two-wheel vehicles used predominantly in competitive sport (trial motorcycles) the date set in Article 2(2) shall be 1 January 2004 and the date set in

Article 2(3) shall be 1 July 2005.

Such special vehicles are defined as vehicles with the following characteristics:

- *maximum seat height: 700 mm*
- *minimum ground clearance: 280 mm*
- *maximum fuel tank capacity: 41.*
- *Minimum overall gear ratio in the highest gear (primary ratio x gear ratio x final drive ratio) of 7.5.*

Justification:

A longer transitional period for special vehicles.

(Amendment 10,)
Article 2a (new)

2a. With effect from 1 January 2006, Member States shall refuse to grant EC type-approval pursuant to Article 4(1) of Directive 92/61/EEC for a new vehicle type on grounds relating to measures against air pollution, if it fails to comply with the provisions of Directive 97/24/EC, as amended by this Directive.

For the test, the limit values set out in row B of the table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive, shall be used.

With effect from 1 January 2007¹, Member States shall:

- *consider certificates of conformity which accompany new vehicles pursuant to Directive 92/61/EEC as no longer valid, and*
- *refuse the registration, sale or entry into service of new vehicles which are not accompanied by a certificate of conformity pursuant to Directive 92/61/EEC,*

on grounds relating to the measures to be taken against air pollution, if the vehicles fail to comply with the provisions of Directive 97/24/EEC, as amended by this Directive.

For the test, the limit values set out in row B of the table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive, shall be used.

¹ 1 January 2008 shall be the date applicable to vehicle types of which no more than 5000 units are sold annually in the European Union.

Justification:

Required as a result of the introduction of a new stage.

(Amendment 11)
Article 3(1)(b)

(b) they shall apply to all new vehicles offered for sale on the market of a Member State which comply with the **permissive** limit values set out in row B of the Table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive.

(b) they shall apply to all new vehicles offered for sale on the market of a Member State which comply with the **mandatory** limit values set out in row B of the Table in Chapter 5, Annex II to Directive 97/24/EC, as amended by this Directive.

Justification:

Mandatory limit values are required to provide a clear and unambiguous datum, to provide security for the product development of new engines and techniques and to avoid developments in the wrong direction. On the basis of mandatory limit values tax incentives may be introduced to get low-emission vehicles on the roads as soon as possible. Permissive values alone would be too uncertain for the initiation of new development, there would only be induced effects rather than new developments. Changing permissive values would produce a hotchpotch of approval requirements in the internal market. Clarity is needed, and manufacturers have to be given clear signals with tax incentives on the basis of mandatory values.

(Amendment 12)
Article 3(2a) (new)

2a. Member States may inter alia offer fiscal or financial incentives for the – retrofitting of older two or three-wheel vehicles, if they thereby met the limit values contained in this directive or in the earlier version of Directive 97/24/EC.

Justification:

In the case of older two or three-wheeled vehicles in particular there must be incentives to re-equip them so that even older vehicles may be relatively simply brought up to EURO I two-wheel or EURO II two-wheel standards. The owners of older vehicles in particular should be given financial incentives to protect the environment, as they in particular often cannot afford to retrofit them.

(Amendment 13)
Article 3a (new)

3a. With effect from 1 January 2006 all new two or three-wheel vehicle types with an engine capacity of over 150 cc must be fitted with an on-board diagnostic system or an on-board measurement system to monitor exhaust emissions when the vehicle is in use; from 1 January 2007 this provision shall apply to all two or three-wheel vehicles with an engine capacity of over 150 cc.

The Commission shall submit proposals for supplementary provisions to this effect by 1 July 2003. They shall include:

- limit values for OBD systems with effect from 2006***
- unrestricted and standardised access to the OBD (or OBM) system for inspection, diagnosis, maintenance and repair;***
- standardisation of fault codes;
(- compatibility of replacement parts for repair, replacement and maintenance.***

Justification:

See explanatory statement, point 7.

(Amendment 14)
Article 3b (new)

***3b. On type approval, the serviceability of anti-pollution equipment must be confirmed during the normal life of two or three-wheel vehicles under normal operating conditions:
as from 1 January 2003 for new vehicle types for up to five years or 30,000 kilometres, whichever is the earlier; from 1 January 2004 this provision shall apply to all vehicle types and from 1 January 2006 for new vehicle types for up to five years or 50,000 kilometres, whichever is the earlier. From 1 January 2007 this provision shall apply to all vehicle types. The Commission shall propose the additional provisions to the European Parliament and the Council by 1 January 2002.***

Justification:

See explanatory statement, point 5.

(Amendment 15)
Article 3c (new)

3c. With effect from 1 January 2003, on type approval of new two or three-wheel vehicle types the serviceability of the emission-related equipment during the normal life of a vehicle under normal operating conditions shall be confirmed (in-service compliance checks on properly maintained and operated vehicles). From 1 January 2004 this provision shall apply to all vehicle types. The Commission shall propose provisions to this effect to the European Parliament and the Council by 1 January 2002.

These provisions shall contain, inter alia:

- criteria for carrying out checks,***

- *criteria for selecting the vehicles to be tested,*
- *criteria for carrying out the test,*
- *rules to eliminate possible errors,*

There shall be no charge for the owner/holder of the vehicle.

Justification:

See explanatory statement, point 6.

(Amendment 16)
Article 3d (new)

3d. With effect from 1 January 2003 all new two and three-wheel vehicles must be so constructed as to make it impossible to defeat or bypass emission-control equipment. The Commission shall propose provisions to this effect to the European Parliament and Council by 1 January 2002.

Justification:

It has to be ensured that the use of defeat devices which electronically disable the test cycle settings or special settings for the test cycle ('cycle-by-pass') is avoided as this would produce higher fuel consumption or emissions. Some individual vehicles are completely undrivable at the electronic settings used for the test cycle.

(Amendment 17)
Article 3e (new)

3e. With effect from 1 January 2003 Member States may no longer grant EC type approval and shall refuse national type approval for a two or three wheel vehicle with an engine capacity of over 150 cc on grounds relating to CO₂ emissions and fuel consumption if its emission and fuel consumption values are not established pursuant to Directive 80/1268/EEC as amended by Directive 93/116/EC in its current form.

With effect from 1 January 2004 Member States shall

- ***consider certificates of conformity which accompany new two-wheel motor vehicle with an engine capacity of over 150 cc pursuant to Directive 92/61/EEC as no longer valid, and***
- ***refuse the registration, sale or entry into service of new vehicles which are not accompanied by a certificate of conformity in accordance with Directive 92/61/EEC,***
on grounds relating to CO₂ emissions and fuel consumption, if the emission and fuel consumption values are not established pursuant to Directive 80/1268/EEC as amended by Directive 93/116/EC in its current form.

Justification:

It is obvious that two and three-wheel vehicles need to be covered by the Community strategy for reducing CO₂ emissions produced by traffic. Some development work remains to be done, as there is no reason why a motor cycle with a mass of some 220 kg and carrying one person should have the same or greater fuel consumption and hence CO₂ emissions as a five-seater passenger car. The CO₂ value pursuant to Directive 93/116/EEC must therefore be ascertained for motor cycles of over 150 cc engine capacity in order to obtain comparable values. Another consideration is whether for example the Directive relating to consumer information on fuel economy and CO₂ emissions (Directive 1999/94/EC) should not be extended to two or three-wheel motor vehicles.

(Amendment 18)
Article 4.1 (aa) (new)

(aa) measures to limit the economic impact on those small manufacturers having an annual production volume of less than 5.000 units per approved type.

Justification:

Strict emission standards must be set while taking into account implications for small vehicle

manufacturers.

(Amendment 19)
Article 4(1a) (new)

By 1 July 2001 the Commission shall report on the state of negotiations on a worldwide harmonised test cycle and by 1 July 2002 shall propose a new test cycle to be used to measure emissions in the Type 1 test, corresponding to real driving patterns and to be applicable throughout the world on the major markets. With the submission of a new test cycle the Commission shall also prepare the corresponding correlation factors for the establishment and comparability of the limit values for 2006 in accordance with Annex 1b, paragraph 2.2.1.1.5, row B of this Directive.

Justification:

A new test cycle is urgently needed and the solutions used so far can only be considered as temporary.

(Amendment 20)
Article 4(2)

2. On the elements referred to in paragraph 1, the Commission shall submit, if necessary, a proposal to the European Parliament and the Council, containing inter alia:

(a) a new dedicated test cycle to be used for the measurement of emissions in the type I test;

(b) mandatory emission limit values to be applied from 2006.

2. By 1 January 2002 the Commission shall submit additional provisions to this Directive to the European Parliament and the Council, containing inter alia:

(a) provisions for monitoring the durability of emission control equipment with effect from 1 January 2003 pursuant to Article 3b (new) of this directive;

(b) Provisions on the inclusion of compliance checks on in service vehicles (in-service surveys) in the type approval procedure for two or three-wheeled vehicles with effect from 1 January 2003 pursuant to Article 3c (new) of this

Directive and by analogy with the provisions of Directive 98/69/EC relating to measures to be taken against air pollution by emissions from passenger cars and light commercial vehicles;

(c) Provisions to ensure that defeat devices or electronic cycle- bypass arrangements to cut out or bypass the settings of anti-pollution control equipment are prohibited with effect from 1 January 2003 pursuant to Article 3d (new) of this Directive.

By 1 July 2003 the Commission shall submit supplementary provisions to this Directive to the European Parliament and Council containing requirements for the introduction of an OBD system for two or three-wheel vehicles with an engine capacity of over 150 cc with effect from 1 January 2006 pursuant to Article 3a (new) of this directive and by analogy with the provisions of Directive 98/69/EEC relating to measures to be taken against air pollution by emissions from passenger cars and light commercial vehicles. The Commission shall also propose measures to ensure that replacement or retrofit parts may be placed on the market and to ensure that the development of these parts is not restricted. However, improved type approval procedures for such parts must ensure that only legally complaint parts are placed on the market.

Justification:

Necessary as a result of Articles 3a-3d (new).

(Amendment 21)
Article 4(2a) (new)

The Commission shall also:

- *ensure that only replacement and retrofit parts which comply with Directive 97/24/EEC and this Directive are placed on the market. The issuing of type approval must be sufficiently verifiable and the data on the approvals issued must be quickly, efficiently and transparently retrievable and traceable in a European data system;*
- *to examine the evaporative emission characteristics of 2 and 3-wheel vehicles and, where appropriate, to submit proposals for controlling evaporative emissions (test procedure limit values);*
- *where appropriate, submit proposals for the operation of on-board measurement systems (OBM);*
- *submit proposals for the inclusion of 2 and 3-wheel motor vehicles in the Community strategy for reducing transport CO₂ emissions (agreement to reduce average CO₂ emissions, labelling, tax incentives).*

Justification:

Necessary additions to the Directive.

(Amendment 22)
Article 4(2b) (new)

By 1 January 2003, the Commission shall submit a proposal complementing this Directive to the European Parliament and the Council containing provisions to introduce inspection and maintenance requirements for motorcycles and two and three-wheel motor vehicles.

Justification:

Many motorcycles are subject to tampering. Therefore inspections are absolutely necessary to guarantee that all motorcycles continue to meet emission limit values during their entire lifetime.

(Amendment 23)
Annex, 1(b), 2.2.1.1.5.
Text proposed by the Commission

2.2.1.1.5. Subject to the requirements of 2.2.1.1.6., the test must be repeated three times. The resulting masses of gaseous emissions obtained in each test must be less than the limits shown in the table below (row A):

	Class	Mass of carbon monoxide (CO)	Mass of hydrocarbons (HC)	Mass of oxides of nitrogen (NO _x)
		L ₁ (g/km)	L ₂ (g/km)	L ₃ (g/km)
Limit values for motorcycles (two-wheel) for type approval and conformity of production				
A (2003)	all	5.5	1.2	0.3
B (*)	I (≤150cc)	2.0	0.8	0.2
	II (>150cc)	<i>2.0</i>	<i>0.3</i>	<i>0.1</i>
Limit values for tricycles and quadricycles for type approval and conformity of production (positive ignition)				
A (2003)	all	7.0	1.5	0.4
Limit values for tricycles and quadricycles for type approval and conformity of production (compression ignition)				
A (2003)	all	2.0	1.0	0.65

(*) The values in row B are permissive and applicable for the purposes of Article 3 of the Directive.

Parliament's amendments

2.2.1.1.5. Subject to the requirements of 2.2.1.1.6., the test must be repeated three times. The resulting masses of gaseous emissions obtained in each test must be less than the limits shown in the table below (rows **A and B**):

	Class	Mass of carbon monoxide (CO)	Mass of hydrocarbons (HC)	Mass of oxides of nitrogen (NO _x)
		L ₁ (g/km)	L ₂ (g/km)	L ₃ (g/km)
Limit values for motorcycles (two-wheel) for type approval and conformity of production				
A (2003)	all	5.5	1.2	0.3
B (2006)	I ¹ (≤150cc)	2.0	0.8	0.2
	II ² (>150cc)	2.3	0.2	0.15
Limit values for tricycles and quadricycles for type approval and conformity of production (positive ignition)				
A (2003)	all	7.0	1.5	0.4
B (2006)	I ¹ (≤150cc)	5.0	1.2	0.3
	II ² (>150cc)	2.9	0.25	0.2
Limit values for tricycles and quadricycles for type approval and conformity of production (compression ignition)				
A (2003)	all	2.0	1.0	0.65
		Particulate matter (PM) L ₄ (g/km)		0.10
B (2006)	I ¹ (≤150cc)	1.4	0.7	0.45
	II ² (>150cc)	0.80	0.15	0.65
		Particulate mass (PM) L ₄ (g/km)		0.07

For vehicles with an engine capacity of ≤150 cc, in the type I test the two complete cycles during which no gas is collected shall be omitted.

² The values shown in row B(II) for vehicles with an engine capacity >150cc shall be ascertained by the Type I Test pursuant to Directive 70/220/EEC as amended by Directive 98/69/EC (Annex I, 5.3.1 and Annex III).

Justification:

Introduction of the mandatory limit values for 2006 (EURO III for two and three-wheel motor vehicles), reform of test conditions for 2006 and to obtain more realistic and comparable results

(≤ 150 cc, no warming up, over 150 cc the passenger car test cycle), introduction of particulate values for diesel engines.

(Amendment 24)

Annex, 1(i), section 6.1.3a (new)

6.1.3a. When testing for compliance with the limit values set out in row BI (table, section 2.2.1.1.5) the following shall apply:

Prior to the initiation of the test, a flow of air of variable speed is directed at the motor cycle or motor tricycle. The ventilation system must include a mechanism controlled by the speed of the bench roller so that, in the range from 10 km/h to 50 km/h, the linear air speed at the blower outlet is equal to the relative speed of the roller with an approximation of 10%. For roller speeds below 10km/h, the air speed may be zero. The end section of the air blower device must have the following characteristics:

Justification:

Omitting the warm-up phase gives a more realistic emission test.

(Amendment 25)

Annex 1(k), section 7.2.1a (new)

7.2.1a When compliance with the limit values in row BI (Table Section 2.2.1.1.5) is being tested, the following shall apply: Once the engine is started the procedures described in 7.2.2-7.2.5 shall be carried out simultaneously.

Justification:

Omitting the warm-up phase gives a more realistic emission test.

DRAFT LEGISLATIVE RESOLUTION

European Parliament legislative resolution on the proposal for a European Parliament and Council Directive amending Directive 97/24/EC on certain components and characteristics of two or three-wheel motor vehicles (COM(2000) 314 – C5-0334/2000 – 2000/0136(COD))

(Codecision procedure: first reading)

The European Parliament,

- having regard to the Commission proposal to the European Parliament and the Council (COM(2000) 314¹),
 - having regard to Article 251(2) and Article 95 of the EC Treaty, pursuant to which the Commission submitted the proposal to Parliament (C5-0334/2000),
 - having regard to Rule 67 of its Rules of Procedure,
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Policy and the opinion of the Committee on Regional Policy, Transport and Tourism (A5-0015/2001),
1. Approves the Commission proposal as amended;
 2. Asks to be consulted again should the Commission intend to amend its proposal substantially or replace it with another text;
 3. Instructs its President to forward its position to the Council and Commission.

¹ OJ C 337, 28.11.2000, p.140.

EXPLANATORY STATEMENT

There is at present a welcome revival in the use of motorcycles and mopeds in Europe. Every year about 1 million motorcycles of over 50 cc and more than 1.5 million mopeds of up to 50 cc registered in Europe. They have an important part to play in the mobility system of the future (see the Green Paper on the citizens' network, COM (1995) 601), but where are the innovations? Despite their low share of traffic volume, motorcycles and motor tricycles are producing an increasingly disproportionate amount of pollution. If the trend persists, according to the Auto Oil Programme II, in 2010 motorcycles will produce 15% of transport hydrocarbon emissions although constituting only 2-3% of total traffic volume in Europe. And that is only the average value. In urban areas, where there is more intensive motorcycle use in summer in particular, the effects of pollution (ozone formation) soar. There seems to be a lasting trend towards the motorcycle within and outside the EU, so the EU needs to promote environmentally friendly development outside Europe as well. For one thing is clear: in future recreational motorcycling and environmental protection will have to be combined.

The Auto Oil I programme did not cover two or three-wheel vehicles. Only since June 1999 have the first exhaust emission values (Euro I – two wheel vehicles) been in existence on a European basis, but at such undemanding levels that many motorcycles already met them without any new technology. As the standards were so low manufacturers did not have to make any special effort to meet them. With the introduction of Euro III and IV for passenger cars and light commercial vehicles (Directive 98/69/EC, amending Directive 70/220/EEC) and for heavy duty vehicles (Directive 99/96/EC amending Directive 88/77/EEC) substantial reductions in exhaust emissions from these vehicle types were required.

The outcome of the vigorous debate on this new legislation has shown the successes that can be achieved in improving air quality using the scope offered by technology. New high-technology solutions were produced, giving the European industry a competitive advantage and thus safeguarding jobs as well. The original Commission proposals were greatly improved. In addition to introducing a mandatory second stage (Euro IV) of limit values, improvements included extending the rules governing the durability of emission control equipment, intensified checks to ensure that the limit values measured for type approval are met in service (in-service surveys), the introduction of on-board diagnostic systems to notify the driver when limit values are being exceeded and a realistic test cycle without a warm-up stage and a cold-start test at – 7°C.

The successes achieved by the European Parliament in the conciliation procedure on the emissions legislation for passenger cars and light commercial vehicles and eventually for heavy-duty vehicles have set the standard for legislation for two and three-wheel vehicles. The air quality policy success story needs to be extrapolated to bring the requirements for motorcycles and cars back into line. At present, comparative measurement using the car test cycle shows that motorcycles and mopeds produce several times the pollution of new cars (averaging between 1.5 to 5 times as much, depending on vehicle and pollutant. There are examples of vehicles where values are even higher, e.g. HC limit value for cars under Euro III, 0.2 – motor cycle emission level 1.7 as measured. The current motor cycle limit values would allow even higher figures. Improving the present Commission proposal for emission legislation for two or three wheel motor vehicles (COM (2000) 314) would seem to be called for, in seven respects in particular:

- (1) Mandatory second stage for limit values in 2006

With the limited time available until the entry into force of Euro II for motor cycles in 2003 there is no point in amending these limit values at this stage, although it should be pointed out that many new r cycles now on the market already meet the values proposed by the Commission for 2003. (The review of registrations carried out by the German Federal Office for Motor Traffic lists over 80 motorcycles meeting the Euro II standards, and ten which even meet the permissive Euro III motorcycles values proposed for 2006.)

As it did in the case of car and commercial vehicle emissions legislation, the Commission is not proposing any mandatory second stage, Euro III - motor cycles. It does mention stages 1 and 2, but sets new limit values only for 2003 and for 2006 merely indicates 'permissive' values (Commission proposal, Article 4, and offering the possibility only 'if necessary' of a dedicated test cycle and limit values to apply from 2006!).

This is highly reminiscent of the proposal for heavy-duty vehicles where the Commission also did not wish to propose any mandatory second stage with the argument that it should first await the world-wide test cycle. However, our legislation cannot be designed to set limits to technical progress. The use of catalysers and modern emission control technology seems capable of reducing pollution to levels even meeting the Euro III values for passenger cars in the passenger car test cycle.

We also need a genuine second stage for motorcycles with challenging mandatory limit values. Only mandatory values will allow the industry to make it plans with certainty. This will give a suitable lead time to develop new engines and emission control technology which will definitely be needed, as substantial process will require new technology, as is clear from emission figures for vehicles currently on the road. Vehicles with for example completely redesigned or new direct injection engines give very good emission values; these are engines currently emerging from the development departments. Clear signals need to be given, and this is especially true in view of the small production runs in comparison with those for cars. It is completely baffling that the Commission has set no particulate matter limit values for diesel engined three-wheeled vehicles.

(2) Tax incentives to expedite the introduction of low-emission vehicles and the retrofitting of older vehicles

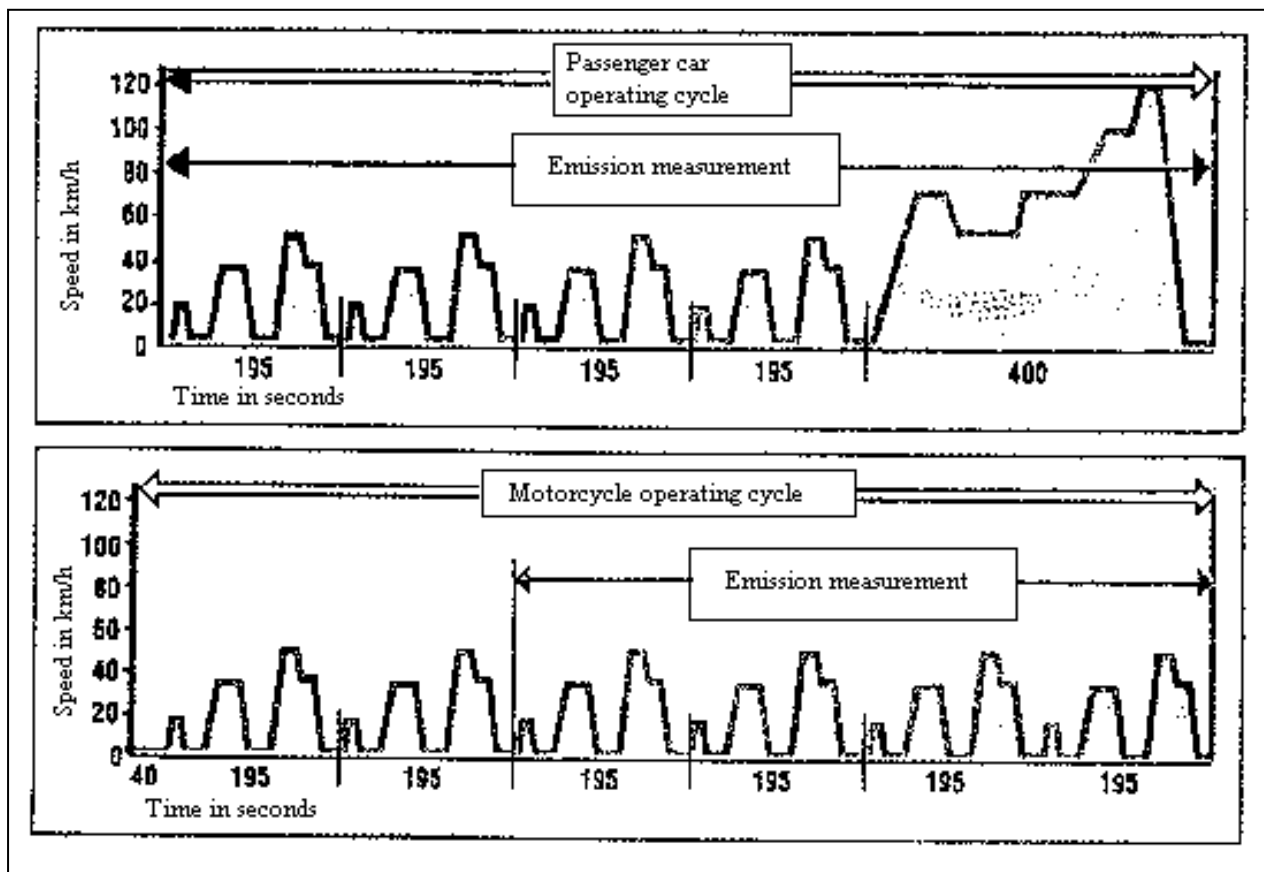
Tax incentives are particularly appropriate in the case of two-wheeled vehicles to encourage an early changeover to new lower emission vehicles, which would now meet the limit values set for 2003 or 2006. In addition this will encourage the development of new technologies. Retrofitting should also be encouraged in the case of older motorcycles to fit them with relatively simple devices to bring them up to Euro I or Euro II motorcycle standards. Owners of older vehicles in particular should be given financial incentives to protect the environment as they are often not in a position to fund such alterations themselves.

(3) Suitable test procedure

As in the case of passenger cars the test cycles for motorcycles must be made more realistic. The very obvious differences between the prescribed measurement and test methods and actual driving patterns have caused engines to be 'improved' in the wrong directions, ignoring actual practice. In the past measurements are taken on motorcycles only when the engine is hot after

two warm-up test cycles and up to speeds of no more than 50 km/h (ECR R40): this bears little relation to reality. At present most pollutants are emitted while a motor cycle is being preconditioned for the test cycle rather than while the gases are being collected. The Commission is now proposing deleting only the first 40 seconds and leaving the test cycle otherwise unchanged. This would have a minimum effect.

Graphic comparison between the new European test cycle (pursuant to Directive 70/220/EEC as amended by Directive 98/69/EC) for cars and the current ECE R-40 test cycle for motor cycles:



For passenger cars measurements begin when the engine is started, and include in addition to the urban cycle an extra-urban cycle with speeds up to 120 km/h. On 1 January 2002 a cold start test at -7°C will also be introduced.

In view of the global market and the smaller production runs than in the case of cars, a world-wide cycle makes sense. At present there are widely differing test procedures for the main markets: in Japan, ISO 6460, in Singapore, the FTP, in India, India Drive, in Taiwan, CNS, in the USA, the FTP – the same test cycle as for cars. As no dedicated cycle has been developed anywhere in the world for motorcycles, let alone tested and accepted worldwide, and this is most unlikely in the foreseeable future, realistic alternatives need to be sought. The rapporteur is therefore proposing that the new European operating cycle (for passenger cars) be applied from 2006 to motor cycles with engines of over 150 cc capacity, and applying the Euro III car limit values for the Euro III motorcycle stage. This will make the test conditions more realistic and in particular comparable with those for cars. Progress towards a world-wide test cycle obviously needs to be encouraged. If a new test procedure should then exist, the Commission will produce correlation factors to make it possible to represent the results of an old and a new test procedure, as has been done in other fields.

For two-wheel motor vehicles with less than 150 cc engine capacity, the at present unmeasured warm-up phase should be deleted for Euro III motorcycles for 2006.

(4) No difference between test operation and road operation

The use of defeat devices, i.e. electronically disabling the test cycle settings, or specific settings for the test cycle only (cycle-bypass) must be prevented, as they increase fuel consumption or emissions. It seems that some vehicles are practically undrivable if the electronic settings for the test cycle is are in use.

(5) Ensuring the durability of emission control devices

It is almost more important than strict limit values, but without ignoring them, to ensure that these values are still complied with after thousands of kilometres in service. This is where the real potential in exhaust reductions lies. When a two or three-wheel vehicle is being type approved, the requirement must be that after 30 000 kilometres with effect from 2003 (Euro II motor cycles) and 50 000 kms with effect from 2006 (Euro III motor cycles) or after five years in service, whichever is the earlier, the exhaust limit values are still complied with.

(6) Checking in-service compliance

If the serviceability of emission control equipment is to be monitored throughout the guaranteed life of vehicles, in-service checks must be introduced along with the Euro II motorcycle with effect from 2003. That is the only way of detecting and removing or other failures in the durability of emission control equipment. (Deteriorating emission results may be caused by design faults, material failure or faulty operating instructions, for example.)

(7) On-board diagnostics for motorcycles

Reducing emissions in practice also means considering on-board diagnostic systems for two or three-wheel vehicles, to monitor emission control on a permanent basis and to record failures of individual components and indicate them by warning lights. Developing and adapting this technology for two and three wheel motor vehicles will take some time. It should however be introduced at the latest when Euro stage III for motor cycles comes into force in 2006 for vehicles of over 150 cc.

In addition to conventional emissions the question of CO₂ emissions from transport sources is now an issue (Kyoto process, ECCP programme COM(2000) 88). Two or three-wheel vehicles obviously have to be included in the Community strategy for reducing CO₂ emissions from cars. Some development work seems to be required here as it is not easy to explain why a 220 kg motor cycle carrying one person should consume as much or more and thus emit as much CO₂ as a five-seater car. The CO₂ value pursuant to Directive 93/116/EEC must therefore also be determined for motorcycles of over 150 cc, and the desirability of applying Directive 1999/94/EC on CO₂ and fuel consumption labelling to two and three-wheel motor vehicles should also be considered.

OPINION OF THE COMMITTEE ON REGIONAL POLICY, TRANSPORT AND TOURISM

for the Committee on the Environment, Public Health and Consumer Policy

on the proposal for a European Parliament and Council Directive amending Directive 97/24/EC on certain components and characteristics of two or three-wheel motor vehicles (COM(2000) 314 – C5-0334/2000 – 2000/0136(COD))

Draftsman: Rijk van Dam

PROCEDURE

The Committee on Regional Policy, Transport and Tourism appointed Rijk van Dam draftsman at its meeting of 12 September 2000.

It considered the draft opinion at its meetings of 21 November and of 5 December 2000.

At the last meeting it adopted the following amendments unanimously.

The following were present for the vote: Konstantinos Hatzidakis, chairman; Helmuth Markov, vice-chairman; Emmanouil Mastorakis, vice-chairman; Rijk van Dam, draftsman; Sir Robert Atkins, Emmanouil Bakopoulos, Carlos Bautista Ojeda (for Reinhold Messner pursuant to Rule 153(2)), Rolf Berend, Theodorus J.J. Bouwman, Philip Charles Bradbourn, Martin Callanan, Felipe Camisón Asensio, Alejandro Cercas Alonso (for Danielle Darras pursuant to Rule 153(2)), Carmen Cerdeira Morterero, Luigi Cesaro, Francis F.M. Decourrière, Proinsias De Rossa (for Mark Francis Watts pursuant to Rule 153(2)), Garrelt Duin, Alain Esclopé, Harald Ettl (for Gilles Savary pursuant to Rule 153(2)), Jacqueline Foster (for Giorgio Lisi), Mathieu J.H. Grosch, Catherine Guy-Quint (for Giovanni Claudio Fava pursuant to Rule 153(2)), Ewa Hedkvist Petersen, Mary Honeyball, Juan de Dios Izquierdo Collado, Georg Jarzembowski, Karsten Knolle (for Francesco Musotto), Dieter-Lebrecht Koch, Sérgio Marques, Hans-Peter Martin (for Juan Ojeda Sanz), Erik Meijer, Rosa Miguélez Ramos, James Nicholson (for Carlos Ripoll i Martínez Bedoya), Josu Ortuondo Larrea, Karla M.H. Peijs, Wilhelm Ernst Piecyk, Samuli Pohjamo, Reinhard Rack, Isidoro Sánchez García, Agnes Schierhuber (for Dana Rosemary Scallon), Brian Simpson, Renate Sommer, Per Stenmarck (for Ingo Schmitt), Dirk Sterckx, Ulrich Stockmann, Margie Sudre, Ioannis Theonas (for Alonso José Puerta), Gary Titley (for Joaquim Vairinhos pursuant to Rule 153(2)), Johan Van Hecke (for Ari Vatanen) and Jan Marinus Wiersma (for Demetrio Volcic).

SHORT JUSTIFICATION

1. Introduction

The Commission has proposed an amending Directive to Directive 97/24/EC. The Directive to be amended deals with the components and characteristics of two and three -wheel motor vehicles. It established a set of harmonised standards for the components and characteristics of two and three wheeled vehicles, especially motor bikes. It has been described as a "multi-directive" for the homologation of two and three wheel motor vehicles in the European Union. At the time of its adoption (17 June 1997) provision was made in the legislation for the Commission to bring forward within two years an amending Directive on the specific topic of ambient air quality targets and emission ceilings. These targets and ceilings are to be based on research conducted in the intervening period and an appraisal of their cost impact. The draft amending Directive (Com /2000/314) now to be considered deals with these matters and related test procedures.

2. Background and previous consideration by the Parliament

Directive 97/24/EC was subject to a lengthy and detailed conciliation procedure which went to a third reading. The Parliament could not accept the Commission's original proposals for vehicle emission limits and the proposal was amended to provide for the two year research period. Article 5 of Directive 97/24/EC refers to "a further tightening of the limit values" but requires the Commission to "take into account and assess the cost-effectiveness of the various measures for reducing pollutant emissions" At the same time a key objective is to make progress towards the air quality objectives of the AUTO-OIL II Programme

The Commission points out in its explanatory memorandum to the draft amending Directive that the relative share of motorcycles emissions within the total transport sector is increasing rapidly, from 13.7% in 2010 to 20% in 2020 for hydrocarbons, although motorcycles would only constitute 2% to 3% of the total traffic volume. Motor cycle passenger kilometres increased by 6% in Europe in the 1990s.

3. Types of Emissions and technical solutions

There are three main pollutants to be regulated; carbon monoxide(CO),hydrocarbons(HC) and oxides of nitrogen (NOx). For two stroke engines the currently feasible technologies are the oxidation catalyst(OC) and direct injection(DI). For four-strokes they are secondary air injection(SAI); SAI combined with an oxidation catalyst; and a three-way catalyst(TWC). SAI can reduce hydrocarbon emissions by up to 25%; OC by between 50% and 65% ; and TWC by between 60% and 80%. Only TWC gives a significant reduction in NOx emissions. Direct injection is most efficient for two strokes bringing carbon monoxide emissions down by 70% but raises NOx emissions to four-stroke engine levels. The application of the new Type 1 test limits proposed by the Commission will reduce hydrocarbon and carbon monoxide emissions by 60% for four strokes and hydrocarbons by 70%; and carbon monoxide by 30% for two strokes.

4. Cost Effectiveness Ratios

For four stroke vehicles the estimated retail price increase per vehicle will be between 0.6% and 3.5% for the SAI solution; 1% and 12% for OC with SAI ; and 4.7% and 17% for TWC. For two strokes the price increase occasioned by OC will be between 2% and 11.5% or between 4.5% and 10% for DI. These increased unit cost variations are largely due to the different series volumes over which the costs will have to be amortised. A general observation would be that smaller manufacturers would find it more difficult to hold costs down.

5. Timescales and phased introduction

The draft amending Directive proposes that from 1 January 2002 no Member State may refuse to grant approval or prohibit the registration and sale of two and three wheel vehicles meeting the new emission standards. **From 1 January 2004 Member States shall refuse the registration, sale or entry of new vehicles which do not meet the new emission limits.** While this kind of phased implementation is acceptable there might be concern that the small and medium sized manufacturers will find it especially difficult to meet these deadlines. There is a definite case for extending the 2004 deadline by one year.

Similarly single cylinder, two-stroke trials motorcycles intended for off- road use have design characteristics related to their intended purpose which will make it very difficult for manufacturers to meet these deadlines. Annual European sales volumes amount to about 9000 vehicles. There is an argument for a temporary exemption for these vehicles to the year 2005.

6. Tax incentives

The amending Directive allows Member States to provide tax incentives only for vehicles which meet its provisions if they are offered for sale in advance of the new mandatory emission values coming into force; or they comply with permissive limit values.

7. Possible future proposals

If necessary the Commission will submit new mandatory limit values to be applied from 2006. The decision to do this will be based on an assessment of

- * technical developments in the field of emission control technology
- * advances in the development of a more representative test cycle
- * the opportunity to harmonise the test cycle on a world-wide basis
- and
- * the correlation of limit values between current and the new test cycle.

8. Conclusions

The Regional Policy, Transport and Tourism Committee asks the Committee on the Environment, Public Health and Consumer Policy, the competent Committee, to include the following amendments in its report.

AMENDMENTS

The Committee on Regional Policy, Transport and Tourism calls on the Committee on the Environment, Public Health and Consumer Policy, as the committee responsible, to incorporate the following amendments in its report:

Text proposed by the Commission

Amendments by Parliament

(Amendment 1)

Article 2(3), introductory phrase

3. With effect from 1 January **2004**,
Member States shall:

3. With effect from 1 January **2005**,
Member States shall:

Justification:

This later date will allow smaller and medium sized manufacturers time to adjust their production runs to the new emission requirements.

(Amendment 2)

Article 2(4) (new)

4. Single cylinder, two stroke trial motorcycles designed for off-road use (design features denoting this to include fuel tank capacity, seat height, engine, air filter, and exhaust systems) are to be exempt from the provisions of paragraph 2 of this Article until 1 January 2005

Justification:

This will allow small specialised manufacturers of these vehicles sufficient time to define proper engine solutions.