II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DIRECTIVE 92/97/EEC

of 10 November 1992

amending Directive 70/157/EEC on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof,

Having regard to the proposal from the Commission (1),

In cooperation with the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas measures should be adopted with the aim of progressively establishing the internal market over a period expiring on 31 December 1992; whereas the internal market will comprise an area without internal frontiers in which the free movement of goods, persons, services and capital will be ensured;

Whereas the European Parliament has already called on the Commission to submit a proposal in 1992 laying down the maximum permissible noise limits taking account of the noise disturbance thresholds defined by the Organization for Economic Cooperation and Development (OECD);

Whereas Council Directive 70/157/EEC (4) lays down limit values for the sound level of motor vehicles; whereas these limit values were reduced for the first time by Directive 77/212/EEC (5) and for the second time by Directive 84/424/EEC (6); whereas these reductions were particularly severe in the case of motor buses, motor coaches and lorries, amounting to approximately 10 decibels (dB (A));

Whereas Council Directive 70/157/EEC is one of the separate directives of the EEC type-approval procedure established by Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (7);

Whereas the Council, in adopting Directive 84/424/EEC amending Directive 70/157/EEC, decided that the provisions of the Directive would later be reviewed on a proposal from the Commission; whereas the proposal from the Commission was based on studies and research concerning possible further legislative measures taking account simultaneously of all the main aspects of Community rules in the motor-vehicle sector, in particular those relating to safety, environmental protection and energy conservation;

Whereas the protection of the public against noise pollution requires additional suitable measures to reduce still further the sound level of motor vehicles; whereas such measures must take account of the technological advances to be applied; whereas enough time must consequently be allowed for their implementation after adoption of this Directive so that the technological advances, at present at the prototype stage, can be applied to series production; whereas the limit values currently applicable to heavy goods vehicles took effect only from 1 October 1989;

(1) OJ No C 193, 24. 7. 1991, p. 3.
(2) OJ No C 125, 18. 5. 1992, p. 182 and Decision of 28 October 1992 (not yet published in the Official Journal).
(3) OJ No C 49, 24. 2. 1992, p. 7.
(4) OJ No L 42, 23. 2. 1970, p. 16, as last amended by Directive 89/491/EEC (OJ No L 238, 15. 8. 1989, p. 43).
(5) OJ No L 66, 12. 3. 1977, p. 33.
(6) OJ No L 238, 6. 9. 1984, p. 31.
(7) OJ No L 42, 23. 2. 1970, p. 1, as last amended by Directive 87/403/EEC (OJ No L 220, 8. 8. 1987, p. 44).

Whereas achievement of a significant and effective reduction of such nuisances will require that the differences between the measuring techniques in current use and the actual traffic conditions be reduced to the maximum extent possible; whereas certain types of technology cannot yet be verified and are not yet comparable with those used hitherto in the type-approval procedures for motor vehicles;

Whereas the current measuring conditions, and in particular the definition of the surface of the test track and certain ambient conditions during the tests, such as temperature, atmospheric pressure, humidity, wind speed and background noise require more detailed description; whereas those closer details will be provided as soon as possible by means of the procedure referred to in Article 13 of Directive 70/156/EEC;

Whereas, of the noise pollution emanating from vehicles, that caused by the tyres has proved to be particularly severe when the vehicles' speed exceeds 60 km/h; whereas protecting the public effectively against noise pollution, particularly that caused by traffic in urban areas, requires that two further stages be completed; whereas the first stage, covered by this Directive, consists in giving as much additional weight as possible to the current requirements for each category of vehicle with respect to the sound levels of the mechanical parts and exhaust systems of motor vehicles; whereas the second stage — in the light of further, more detailed studies and research on the problems associated with, and the technical solutions for noise created by, the contact between tyres and the road surface — will result in the establishment of realistic and reproducible criteria and methods for determining this important type of noise pollution and for laying down the corresponding requirements to be complied with;

Whereas completion of the first stage requires that Annex I to Directive 70/157/EEC be amended by reducing the sound-level values expressed in dB (A) for each category of vehicle referred to in the said Annex and by improving the test method for high-powered vehicles; whereas this type of vehicle is increasingly being designed so as to produce a higher ratio between engine power and vehicle mass and the curve representing the torque as a function of engine speed has been modified to produce greater motive force at low engine speed; whereas these new designs consequently give rise to greater use of gear ratios in urban traffic and have a major influence on the noise emitted by the mechanical parts as compared with road noise; whereas account has been taken of these new designs by modifying the measuring technique for this type of vehicle, due allowance having been made for the speed of approach to the acceleration section where the sound level is to be measured;

Whereas, given the many different types of tyre and road surface which exist and which correspond to the different geographical and atmospheric conditions, it is necessary to continue studies and research so as to be able to establish criteria to be met by tyres and to define a numerical value for the type-approval of motor vehicles; whereas the results of such studies and research will permit the introduction, at a second stage, of further requirements, in addition to measures covering noise of mechanical source;

Whereas the control of sound emissions produced by the interaction between tyres and roadway must be based not only on tyres but also on the composition of the asphalt (noise-absorbing asphalt); whereas it is necessary to continue studies and research so as to be able to ascertain numerical indices in order to establish objective criteria for road conformity;

Whereas Member States should be allowed to advance the authorization for introduction of vehicles which satisfy the Community standards by means of tax incentives; whereas this implies that the Council should, by 1 October 1995, adopt the requirements for the second stage, for which the Commission will present a proposal by 31 March 1994;

Whereas, to enable the European environment to obtain maximum benefit from these provisions while at the same time ensuring the unity of the market, it is necessary to lay down stricter European standards based on total harmonization,

HAS ADOPTED THIS DIRECTIVE:

Article 1

The Annexes to Directive 70/157/EEC are hereby replaced by the Annexes to this Directive.

Article 2

1. With effect from 1 July 1993, Member States may not, on grounds relating to the permissible sound level and the exhaust system:

— refuse, in respect of a type of motor vehicle, to grant EEC type-approval, to issue the document referred to in the last indent of Article 10 (1) of Directive 70/156/EEC, or to grant national type-approval,

or

— prohibit the initial entry into service of vehicles,

if the sound level and the exhaust system of this type of vehicle or of these vehicles comply with the requirements of Directive 70/157/EEC as amended by this Directive.

2. With effect from 1 October 1995, Member States:

— may no longer grant EEC type-approval or issue the document referred to in the last indent of Article 10 (1) of Directive 70/156/EEC in respect of a type of motor vehicle,

— must refuse to grant national type-approval in respect of a type of motor vehicle,

of which the sound level and the exhaust system do not comply with the requirements set out in the Annexes to Directive 70/157/EEC as amended by this Directive.

3. With effect from 1 October 1996, Member States shall prohibit the initial entry into service of motor vehicles of which the sound level and the exhaust systems do not comply with the requirements set out in the Annexes to Directive 70/157/EEC as amended by this Directive.

Article 3

Member States may make provision for tax incentives only in respect of motor vehicles which comply with this Directive. Such incentives must comply with the provisions of the Treaty and, in addition, must meet the following conditions:

— they must apply to all nationally-manufactured motor vehicles and all imported vehicles which are offered for sale on the market of a Member State and which meet, in advance, the requirements of this Directive due to be complied with in 1995,

— they shall be terminated with effect from the mandatory application of the sound level values laid down in Article 2 (3) for new motor vehicles,

— in respect of each type of motor vehicle, they must represent an amount substantially below the additional cost of the technical solutions introduced to ensure compliance with the established values and of their installation on the vehicle.

The Commission must be informed in good time of plans to institute or change tax incentives as referred to in the first subparagraph. The Commission must give its consent before such incentives are put into effect and must, in particular, take into account the impact of such incentives on the internal market.

Article 4

1. Specific details on the conditions of measurement shall be supplied as soon as possible via the procedure referred to in Article 13 of Directive 70/156/EEC.

2. Subsequent measures intended, in particular, to reconcile safety requirements with the need to limit the noise arising from contact between tyres and the road surface shall be decided upon before 1 October 1995 by the Council acting by a qualified majority on the basis of a proposal from the Commission, which shall take account of the studies and research to be performed on this source of noise, and shall be presented by 31 March 1994.

3. Member States shall take the necessary measures to have the type-approval sound level values published in such a way as to make them widely accessible, before 1 October 1994. They shall inform the Commission before this date of the steps taken to comply with this requirement.

Article 5

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 1 July 1993. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, they shall contain a reference to this Directive or be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive.

Article 6

This Directive is addressed to the Member States.

Done at Brussels, 10 November 1992.

For the Council
The President
R. NEEDHAM

ANNEX I

EEC TYPE-APPROVAL IN RESPECT OF THE SOUND LEVEL OF A TYPE OF MOTOR VEHICLE

1. DEFINITIONS

For the purposes of this Directive:

1.1. **Type of vehicle**

means vehicles which do not differ essentially as regards the following parts:

1.1.1. the shape or materials of the bodywork (particularly the engine compartment and its soundproofing);

1.1.2. the length and width of the vehicle;

1.1.3. the type of engine (positive or compression ignition, two- or four-stroke, reciprocating or rotary piston, number and capacity of cylinders, number and type of carburettors or injection systems, arrangement of valves, rated maximum power and corresponding engine speed(s));

1.1.4. the transmission system, the gear ratio in which the test is performed and the relevant overall ratio(s);

1.1.5. the number, type and arrangement of the exhaust systems;

1.1.6. the number, type and arrangement of the intake systems.

1.1.7. Notwithstanding the provisions of items 1.1.2 and 1.1.4, vehicles other than those in categories M_1 and N_1 (1) having the same type of engine and/or different overall gear ratios, may be regarded as vehicles of the same type.

However, if the above differences provide for a different test method, these differences are to be considered as a change of type.

1.2. **Exhaust and intake systems**

1.2.1. *Exhaust systems*

means a complete set of parts necessary to reduce the noise produced by the vehicle's engine exhaust.

1.2.2. *Intake systems*

means a complete set of parts necessary to reduce the noise produced by the vehicle's engine intake.

1.2.3. For the purposes of this Directive, these systems do not include the manifolds.

1.3. **Different types of exhaust or intake system**

means systems characterized by fundamental differences, such as the following:

1.3.1. systems in which the components bea different trade marks or trade names;

1.3.2. systems in which the characteristics of the materials of a component differ, or in which the components are of different shape or size; a change in the plating procedure (galvanization, aluminium coating, etc.) is not deemed to produce a difference of type;

1.3.3. systems in which the operating principles of at least one component differ;

1.3.4. systems in which the components are combined differently.

1.4. **Component of an exhaust or an intake system**

means one of the separate components which together form the exhaust system (e.g. exhaust pipes, the silencer proper) or the intake system (e.g. air filter).

1.5. **Overall gear ratio**

means the number of turns made by the engine per each turn of the driving wheels.

(1) In accordance with the definition given in item 0.4 of Annex I to Directive 70/156/EEC (OJ No L 42, 23. 2. 1970, p. 16).

2. APPLICATION FOR EEC TYPE-APPROVAL

2.1. The application for EEC type-approval in respect of the sound level of a type of motor vehicle must be submitted by the manufacturer of the vehicle or his authorized representative.

2.2. It must be accompanied by the undermentioned documents in triplicate and the following information:

2.2.1. a description of the type of vehicle with reference to the points mentioned in item 1.1. The numbers and/or symbols identifying the engine type and vehicle type must be indicated;

2.2.2. a list, with appropriate identification, of the component parts of the exhaust and intake systems;

2.2.3. a drawing of the entire exhaust system with an indication of its position on the vehicle;

2.2.4. a detailed drawing of each component so that it can be easily located and identified, and an indication of the materials used.

2.3. A vehicle representative of the type in respect of which type-approval is sought must be submitted to the technical service responsible for the tests by the vehicle manufacturer or his authorized representative.

2.3.1. In the case of item 1.1.7 the single vehicle, representative of the type in question , will be selected by the technical service conducting approval tests, in accordance with the vehicle manufacturer, as that with the lowest mass in running order with the shortest length and following the specification laid down in item 5.2.2.4.3.3.1.2.

2.4. At the request of the technical service, a specimen of the exhaust system and an engine of at least the same cylinder capacity and rated maximum power as that fitted to the vehicle in respect of which type-approval is sought must also be submitted.

2.5. Before granting type-approval the competent authority must verify the existence of satisfactory arrangements for ensuring effective control of the conformity of production.

3. MARKINGS

3.1. The exhaust and intake system components, excluding fixing hardware and pipes, must bear:

3.1.1. the trade mark or name of the manufacturer of the systems and their components;

3.1.2. the manufacturer's trade description.

3.2. These markings must be clearly legible and indelible, even when the system is fitted to the vehicle.

4. EEC TYPE-APPROVAL

4.1. If an application within the meaning of 2.1 is approved, the competent authority will draw up a certificate, corresponding to the type which appears in Annex III, to be attached to the EEC type-approval certificate for the vehicle.

5. SPECIFICATIONS

5.1. **General specifications**

5.1.1. The vehicle, its engine and exhaust and intake systems must be designed, constructed and mounted such that, under normal conditions of use and notwithstanding the vibrations to which they may be subject, the vehicle satisfies the requirements of this Directive.

5.1.2. The systems must be designed, constructed and mounted so that reasonable resistance to the corrosion phenomena to which they are exposed is obtained having regard to the conditions of use of the vehicle.

5.2. **Specifications relating to sound levels**

5.2.1. *Method of measurement*

5.2.1.1. The sound emitted by the type of vehicle submitted for EEC type-approval must be measured in accordance with each of the two methods described in item 5.2.2.4 in the case of moving vehicles and item 5.2.3.4 in the case of stationary vehicles, respectively (1).

Vehicles having a maximum permissible mass exceeding 2 800 kg must be subjected to an additional measurement of the compressed air noise with the vehicle stationary in accordance with item 5.4, if corresponding brake equipment is part of the vehicle.

(1) A stationary vehicle test is conducted in order to establish a reference value for the authorities which employ this method for the inspection of vehicles in service.