COMMISSION OF THE EUROPEAN COMMUNITIES

COM(91) 243 final

Brussels, 4 July 1991

Proposal for a

COUNCIL DIRECTIVE
AMENDING DIRECTIVE 77/143 EEC ON THE
APPROXIMATION OF THE LAWS OF THE
MEMBER STATES RELATING TO ROADWORTHINESS TESTS
FOR MOTOR VEHICLES AND THEIR TRAILERS

(BRAKES)

(presented by the Commission)

Explanatory Memorandum

General Comments

Actual Situation

Directive 77/143/EEC[1], as amended by Directive 88/449/EEC[2], concerns the technical inspection of heavy goods vehicles, buses, trailers, semi-trailers, taxis, ambulances and light goods vehicles.

This Directive sets the frequency of tests and provides a list of the items to be tested.

Given that Directive 77/143/EEC does not set standard criteria for any of the items that should be tested, it is thus necessary to set common minimum test standards in order to guarantee an equal level of safety and environmental performance throughout the Community.

Directive 91/225/EEC[3] amending Directive 77/143/EEC, which was recently adopted by the Council, is aimed at the establishment of a procedure for the announcement of separate Directives for testing the standard of the items listed in Annex II of Directive 77/143/EEC. It also establishes a Technical Committee which gives the Commission the mandate to adopt measures in order to adjust the technical requirements to progress.

In line with the above, this proposal amends Annex II to Directive 77/143/EEC as amended by 88/449/EEC so as to better define the items of the vehicle braking system that need to be inspected together with criteria (objective and subjective) on the reasons for failure of those items.

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(1) OJ No. L47, 18.02.1977, p. 47

(2) OJ No. L222, 12.08.1988, p. 10

(3) OJ No. L103, 23.04.1991, p. 3

Scope of the proposal

The scope of Directives 77/143/EEC as amended by 88/449/EEC includes heavy and light commercial vehicles (as well as taxis and ambulances) but does not include passenger cars. Passenger cars are the subject of an amending proposal COM(86)214(4). It is the Commission's intention to pursue the amending proposal with the utmost urgency so as to ensure that all vehicles, both passenger and commercial, are subject to the necessary roadworthiness checks.

Vehicles covered by the original Directive 77/143/EEC are subject to a frequency of test at one year after the date on which the vehicle was first used and there after annually (1,1,1,1 etc.). Vehicles subject to amending Directive 88/449/EEC (light vans) have a testing periodicity of four years after the date on which the vehicle was first used, and thereafter every two years (4,2,2,2 etc.). The proposal COM(86)214 would have passenger cars being first tested after 3 years in operation, the next after 5 years and thereafter annually (3,2,1,1,1 etc.).

Member States current roadworthiness schemes largely encapsulate the items to be tested and their criteria for failure as given in Annex II. However, for those Member States that have yet to adopt roadworthiness schemes for the lighter vehicles (both passenger and commercial), the technical annex will provide a formula for the minimum acceptable standard in this safety critical area. The aim being to give a reasonable assurance that vehicles, across the Community, are maintained in an adequate road safety condition.

(4) OJ No. C 133, 31.05.1986, p. 3

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(BRAKES)

The Council of the European Communities,

having regard to the Treaty establishing the European Economic Community and in particular Article 75 thereof,

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

having regard to the opinion of the European Parliament(2),

having regard to the opinion of the Economic and Social Committee(3);

whereas, Council Directive 77/143/EEC(4) as amended by Directive 88/449/EEC(5) provides for the regular roadworthiness testing of certain road vehicles only (buses, heavy and light goods vehicles, heavy trailers and semi trailers, taxi and ambulances) but not for passenger cars;

whereas, through Council Directive 91/225/EEC(6), it is the intention to establish procedures for the announcement of separate Directives for testing the standard of the items listed in Annex II of the above Directives and also to establish a Technical Committee which gives the Commission the mandate to adopt measures in order to adjust the technical requirements to progress;

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(1) OJ N° C
(2) OJ N° C
(3) OJ N° C
(4) OJ N° L 47, 18.02.1977, p. 47
(5) OJ N° L 222, 12.08.1988, p. 10
(6) OJ n° L 103, 23.04.1991, p. 3

whereas, all Member States have adopted procedures for testing heavy commercial vehicles with regard to the condition of the braking system;

whereas, several Member States have national rules for testing the lighter vehicles including passenger cars and that those rules are commensurate with the scheme outlined in this proposal;

whereas, assessment of the type approval procedures for testing vehicle braking for all vehicle types shows that the reproduction of those procedures within the roadworthiness test is not realistic;

whereas, standards that are dictated for in service testing should focus on the maintenance condition of the vehicle, and thereby its ability to meet type approval performance standards, during a relatively simple, quick and inexpensive test;

whereas, at this stage it is not practical to set values for the required braking efficiencies, air pressure settings and build up times, etc. given the varience in Member States test equipments and procedures, the aim of brake performance testing must be that a realistic judgement can be made at the time of testing that the vehicle, irrespective of its laden condition within the bounds of its gross weights, would be safe on the road and that if tested to the technical requirements of the type approval braking Directive 71/320/EEC(7) as amended then it would pass;

whereas, Member States may extend the scope of the braking test to include vehicles or test items outside the scope of this proposal;

whereas, Member States may enhance the severity of the braking test or increase the frequency of testing;

Has adopted this Directive:

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(7) OJ. N° L 202, 6.09.1971, p. 37.

Article 1

Directive 77/143/EEC is hereby amended as follows:

1. Para. I of Annex II to Directive 77/143/EEC as amended by Directive 88/449/EEC, which concerns Braking Systems is replaced by

"I. Braking systems

The following items are to be included in the roadworthiness test of vehicle Braking Systems. The vehicle will fail the test if any of the listed defects to those items are detected. The test results achieved during the checks of the braking systems shall be equivalent to the technical requirements of the braking Directive 71/320/EEC."

Items to be checked/tested	Reasons for failure
1.1 Mechanical condition and operation	
1.11 Footbrake pedal pivot	- too tight - bearing worn - excessive wear/play
1.12 Pedal condition and travel of the brake operating device	- excessive or insufficient reserve travel - brake control not releasing correctly - anti slip provision on brake pedal missing, loose or worn smooth
1.13 Vacuum pump or compressor and reservoirs	- time taken to build up air pressure/vacuum for the effective operation of the brakes is excessive - insufficient air pressure/ vacuum to give assistance for at least two applications of the brake after the warning device has operated (or gauge shows unsafe reading) - air leak causing a noticable drop in pressure or audible air leaks
1.14 Low pressure warning indicator or gauge	- malfunctioning or defective low pressure indicator/ air pressure gauge

1.15	Hand operated brake control valve	- cracked or damaged control, excessive wear - malfunction of control valve - control insecure on valve spindle or valve unit insecure - connections loose or leak in system - unsatisfactory operation
1.16	Parking brake, lever control, parking brake ratchet	- parking brake ratchet not holding correctly - excessive wear at lever pivot or ratchet mechanism - excessive movement of lever indicating incorrect adjustment
1.17	Braking valves (footvalves, unloaders, governors, etc)	- damaged, excessive air leakage - excessive discharge of oil from compressor - insecure/inadequate mounting. - discharge of hydraulic brake fluid
1.18	Couplings for trailer brakes	- defective isolation taps or self sealing valve - insecure/inadequate mounting - excessive leaks

1.19	Energy storage reservoir or pressure tank	- damaged, corroded, leaking - drain device inoperative - insecure/inadequate mounting
1.20	Brake servo units, master cylinder (hydraulic systems)	- servo unit is defective or ineffective - master cylinder defective or leaking - master cylinder insecure - insufficient quantity of brake fluid - master cylinder reservoir cap missing - brake fluid warning light illuminated or defective - incorrect functioning of brake fluid level warning device
1.21	Rigid brake pipes	- risk of failure or fracture - leaks from pipes or connections to couplings - damaged or excessively corroded - misplaced
1.22	Flexible brake hoses	- risk of failure or fracture - damaged, chafing, brake hoses too short, twisted - leaks from hoses or couplings - hose bulging under pressure - porosity
1.23	Brake coverings (linings - pads)	- excessive wear (where visible) - contaminated (oil, grease, etc) (where visible)

1.24	Brake drums, brake discs	- excessive wear, excessive scoring, cracks, insecure or fractured - contaminated (oil, grease, etc) where visible - back plate insecure
1.25	Brake cables, rods, levers, linkage	- cables damaged, knotted - excessively worn or corroded - cable or rod joint insecure - cable guide defective - any restriction to free movement of the brake system - any abnormal movement of levers/rods/linkage indicating maladjustment or excessive wear
1.26	Brake actuators (including spring brakes) or hydraulic wheel cylinders	- cracked or damaged - leaking - insecure/inadequate mounting - excessively corroded - excessive travel of operating piston or diaphragm mechanism - dust protection cover missing or excessively damaged

1.27	Load sensing valve	- defective linkage - incorrect adjustment - seized, not working - missing
1.28	Automatic slack adjusters	- seized or abnormal movement indicating excessive wear or wrong adjustment - defective
1.29	Retarder system (where fitted or required)	- insecure connectors or mountings - defective
1.3	Service brake performance and efficiency	
1.31	Performance (progressively increased to maximum effort)	- little or no braking effort on one or more wheels - braking effort from any wheel is less than 70 % of the highest recorded effort from another wheel on the same axle (where road test necessary then vehicles deviation from a straight line on braking is excessive) - no gradual variation of brake effort (grabbing) - abnormal time lag in brake operation at any wheel - excessive fluctuation of brake effort due to ovality of discs or drums
1.32	Efficiency	- brakes inefficient, minimum performance not met

1.4	Secondary (emergency) brake performance and efficiency (if met by separate system)	
1.41	Performance	- brake(s) inoperative on one side - braking effort from any wheel is less than 70 % of the highest recorded effort from another wheel on the same axle - no gradual variation of efficiency (grabbing) - automatic brake system not working in the case of trailers
1.42	Efficiency	- brake inefficient, minimum performance not met
1.5	Parking brake performance and efficiency	
1.51	Performance	- brake inoperative on one side
1.52	Efficiency	- brake inefficient, minimum performance not met

1.6	Retarder or exhaust brake system performance	- no gradual variation of efficiency (retarder) - defective
1.7	Anti-lock braking	- malfunction of the anti-lock warning device - defective

Article 2

1. Member States shall take the measures necessary to comply with this Directive before 1 January 1993. They shall forthwith inform the Commission thereof.

2. When the Member States adopt the provisions referred to in paragraph 1, these shall contain a reference to this Directive or shall be accompanied by such a reference at the time of their official publication. The form of this reference shall be decided by the Member States.

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

Article 3

This Directive is addressed to the Member States.

Done at Brussels, For the Council

The President

Competitiveness and Employment Impact Statement

I. What is the main reason for introduction this measure?

It is recognised as being of vital importance that vehicles are maintained in such a condition so as to ensure that they are safe and roadworthy. This proposal formalises the key items of the vehicles braking system that need to be tested and inspected giving criteria (both objective and subjective) on the reasons for acceptance or failure of those items. The proposal aims at gaining a reasonable assurance that vehicles, across the Community, are maintained in an acceptable road safety condition.

II. Features of the business in question

All users of vehicles, the subject of Directive 77/143/EEC as amended. Also, garages, technical services and agencies charged with vehicle roadworthiness testing. As things stand at the moment, only commercial vehicles, including taxis and ambulances are covered by roadworthiness Directives. The amendment to include passenger cars within a Community roadworthiness scheme remains on the table of the Council. Until this amendment is adopted this proposal on vehicle brake testing will not affect passenger cars nor those small businesses responsible for their operation and maintenance.

III. What obligations does the measure impose directly on business?

Member States current roadworthiness schemes largely encapsulate the items to be tested and their criteria for failure as given in Annex II. However, for those Member States that have yet to adopt roadworthiness schemes for the lighter vehicles (both passenger and commercial), the technical Annex II will provide a formula for the minimum acceptable standard in this safety critical area. However, as yet passenger cars will be unaffected by this proposal until they are included within the roadworthiness scheme.

IV. What indirect obligations are national, regional or local authorities likely to impose on business?

Implementation of the obligations as described in III.

V. Are there any special provisions in respect of SME's?

Where roadworthiness testing is delegated to private garages it is likely that the equipment and procedures that those garages adopt in testing the vehicles' brakes will be largely uneffected by this proposal.

VI. What is the likely effection:

a) The competitiveness of business

This proposal will equalise the conditions of competition by standardising on the type of test to be applied.

b) Employment

Neutral

VII. Have the relevant representative organisations been consulted?

All Member States roadworthiness testing authorities, the coordinating body of roadworthiness testing agencies (CITA), the European Garage Equipment association, major private testing organisations, the European Motor Manufactoring Industry (CCMC and CLCA) and the European Freight Organisations have been consulted.

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