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)

(91/C 189/16)

COM(91) 243 final

(Submitted by the Commission on 12 July 1991)

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,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas, Council Directive 77/143/EEC (1), as amended by Directive 88/449/EEC (2), provides for the regular roadworthiness testing of certain road vehicles only (buses, heavy and light goods vehicles, heavy trailers and semi-trailers, taxis and ambulances) but not for passenger cars;

Whereas, through Council Directive 91/225/EEC (3), it is the intention to establish procedures for the announcement of separate directives for testing the standard of the items listed in Annex II to 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;

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 whereas 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 variance 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 (4) 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:

Article 1

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

Paragraph 1 of Annex II to Directive 77/143/EEC, as amended by Directive 88/449/EEC, which concerns braking systems, is replaced by the following:

(1) OJ No L 47, 18. 2. 1977, p. 47.
(2) OJ No L 222, 12. 8. 1988, p. 10.
(3) OJ No L 103, 23. 4. 1991, p. 3.
(4) OJ No L 202, 6. 9. 1971, p. 37.

'1. 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 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

Items to be checked/tested	Reasons for failure
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

Items to be checked/tested	Reasons for failure
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 vehicle's 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.