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Working Party on Road Traffic Safety
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PROPOSAL FOR A DRAFT REVISION OF ANNEX 2 TO THE CONSOLIDATED RESOLUTION ON ROAD TRAFFIC (R.E.1): PERIODIC INSPECTION OF VEHICLES - CHECKS TO BE CARRIED OUT

<u>Transmitted by the Expert from the International Motor Vehicle</u> <u>Inspection Committee (CITA)</u>

Note: The text reproduced below was prepared by the experts from CITA, following the invitations by the Working Party on Road Traffic Safety (WP.1) and the Working Party on the Construction of Vehicles (WP.29) (TRANS/WP.29/640, para.30). The proposed text takes account of the technical progress since the original elaboration of annex 2 in 1975. Where possible and appropriate, both the technical content and the numbering were aligned with the European Union Directive 96/96/EC. The proposal had been endorsed by the CITA Bureau Permanent, however, it remains to be submitted to the CITA General Assembly at its next session, for a formal adoption by CITA membership. The proposal refers to the Consolidated Resolution R.E.1 (document TRANS/SC.1/294/Rev.5), however, it should be also taken into account in connection with the development of the Agreement on Periodical Technical Inspections, done at Vienna on 13 November 1997; in this respect a reference is made to document TRANS/WP.29/1999/44.

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Annex 2, amend to read:

"<u>Annex 2</u>

PERIODIC INSPECTION OF VEHICLES - CHECKS TO BE CARRIED OUT (Recommendation 2.6.) LIST OF ITEMS TO BE INSPECTED

INTRODUCTION

This annex contains a list of items that should be included in a periodic vehicle inspection. The following general principles apply:

- 1) Inspections should be carried out using normal inspection techniques, without dismantling or removing any part of the vehicle. The equipment used should be commercially available and that which it is reasonable to provide at an inspection station.
- 2) It must be possible to perform the inspection within a limited time. An average total time of 30 minutes/vehicle is considered reasonable. The actual time taken will vary according to the category and condition of the vehicle concerned.
- 3) Inspections are not limited to safety, but include items related to environmental protection (e.g. exhaust emissions, and noise).
- 4) Items which are related to the condition of the vehicle and its suitability for use on the road but which are not considered essential in a periodic inspection are marked with an (X). All other items listed should be considered as mandatory at a periodic vehicle inspection.

This annex identifies the vehicle system or component(s) to be inspected, gives the method of inspection and provides information on the criteria to be used to determine whether its condition is acceptable.

The "principal reasons for rejection" are not applicable to items that are not prescribed in the law of the country carrying out the inspection.

Where a prescribed item may have to satisfy quantitative criteria in order to be acceptable, the requirements to be met are those defined in the applicable regulations. In this annex "regulations" means relevant national or international regulations, directives or other legal instruments that contain specific provisions relating to the standards to be met at periodic inspection. These are not specified in the list.

Except for some special provisions for public passenger vehicles in section 9, no distinction has been made between the categories of vehicles to which the inspections apply, since this is obvious from the test. Most of the inspections are applicable to all categories of vehicles (goods vehicles, large passenger vehicles, passenger cars and trailers).

Where a method of inspection is given as visual, it means that the inspector will, as necessary, handle relevant components, evaluate noise, etc. in addition to looking at them.

The identification of the vehicle, which is a prerequisite to any inspection, has not been included in this list as it is not a safety item.

	Item	Method		Principal reasons for rejection
		1. BRAKING EQ	QUIP	MENT
1.1.	Mechanical condition	on and operation		
1.1.1.	Service brake pedal pivot	Visual inspection of the components while the brake is operated. <u>Note</u> : Vehicles with power brakes should be inspected with the engine switched off.	(a) (b) (c)	Pivot too tight. Bearing worn. Excessive wear or play.
1.1.2.	Pedal condition and travel of the brake operating device	Visual inspection of the components while the brake is operated. <u>Note</u> : Vehicles with power brakes should be inspected with the engine switched off.	(a) (b) (c)	Excessive or insufficient reserve travel. Brake control not releasing correctly. Anti-slip provision on brake pedal missing, loose or worn smooth.
1.1.3.	Vacuum pump or compressor and reservoirs	Without the engine running, deplete pressure/vacuum until warning device operates. With the engine running, observe time required for vacuum or air pressure to achieve safe working value. Check that pressure relief valve is working. Visual inspection of the components at normal working pressure.	(a) (b) (c) (d)	Insufficient pressure/vacuum to give assistance for at least two brake applications after the warning device has operated (or gauge shows an unsafe reading). Time taken to build up air pressure/vacuum to safe working value not in accordance with the Regulations. Pressure relief valve not working. Air leak causing a noticeable drop in pressure or audible air leaks.
1.1.4.	Low pressure warning indicator or gauge	Without the engine running, deplete pressure/vacuum until warning device operates or observe gauge.	Mal	functioning or defective gauge or indicator.
1.1.5.	Hand operated brake control valve	Visual inspection of the components while the brake is operated.	(a) (b) (c) (d) (e)	Control cracked or damaged, excessive wear. Malfunction of control valve. Control insecure on valve or valve insecure. Loose connections or leaks in system. Unsatisfactory operation.
1.1.6.	Parking brake, lever control, parking brake ratchet	Visual inspection of the components while the brake is operated	(a) (b) (c)	Ratchet not holding correctly. Excessive wear at lever pivot or in ratchet mechanism. Excessive movement of lever indicating incorrect adjustment.
1.1.7.	Braking valves (foot valves, unloaders, governors)	Visual inspection of the components while the brake is operated.	(a) (b) (c) (d)	Valve damaged or excessive air leak. Excessive oil discharge from compressor. Valve insecure or inadequately mounted. Hydraulic fluid discharge or leak.

	Item	Method		Principal reasons for rejection
1.1.8.	Coupling for trailer brakes	Disconnect brake coupling between trailer and drawing vehicle	(a) (b) (c)	Tap or self sealing valve defective. Tap or valve insecure or inadequately mounted. Excessive leaks.
1.1.9.	Energy storage reservoir pressure tank	Visual inspection	(a) (b) (c)	Tank damaged, corroded or leaking. Drain device inoperative. Tank insecure or inadequately mounted.
1.1.10.	Brake servo units, master cylinder (hydraulic systems)	Visual inspection of the components while the brake is operated	(a) (b) (c) (d) (e) (f) (g)	Defective or ineffective servo unit. Master cylinder defective or leaking. Master cylinder insecure. Insufficient brake fluid. Master cylinder reservoir cap missing. Brake fluid warning light illuminated or defective. Incorrect functioning of brake fluid level warning device.
1.1.11.	Rigid brake pipes	Visual inspection of the components while the brake is operated	(a) (b) (c) (d)	Risk of failure or fracture. Pipes or connections leaking. Pipes damaged or excessively corroded. Pipes misplaced.
1.1.12.	Flexible brake hoses	Visual inspection of the components while the brake is operated	(a) (b) (c) (d) (e)	Risk of failure or fracture. Brake hoses damaged, chafing, twisted or too short. Hoses or connections leaking. Hoses bulging under pressure. Hoses porous.
1.1.13.	Brake linings, pads	Visual inspection	(a) (b)	Lining or pad excessively worn. Lining or pad contaminated (oil, grease, etc).
1.1.14.	Brake drums, brake discs	Visual inspection	(a) (b) (c)	Drum or disk excessively worn, excessively scored, cracked, insecure or fractured. Drum or disk contaminated (oil, grease, etc.). Back plate insecure.
1.1.15.	Brake cables, rods, levers, linkages	Visual inspection of the components while the brake is operated	(i) (b) (c) (d) (e) (f)	Cable damaged or knotted. Component excessively worn or corroded. Cable or rod joint insecure. Cable guide defective. Restriction to free movement of the brake system. Abnormal movement of the levers/linkage indicating maladjustment or excessive wear.
1.1.16.	Brake actuators (including spring brakes or hydraulic cylinders)	Visual inspection of the components while the brake is operated	(a) (b) (c) (d) (e) (f)	Actuator cracked or damaged. Actuator leaking. Actuator insecure or inadequately mounted. Actuator excessively corroded. Excessive travel of operating piston or diaphragm mechanism. Dust cover missing or excessively damaged.
1.1.17.	Load sensing valve	Visual inspection of the components while the brake is operated	(a) (b) (c) (d)	Defective linkage. Linkage incorrectly adjusted. Valve seized or inoperative. Valve missing.

	Item	Method	Principal reasons for rejection
1.1.18.	Automatic slack adjusters and indicators	Visual inspection	 (a) Adjuster seized or having abnormal movement, excessive wear or incorrect adjustment. (b) Adjuster defective.
1.1.19.	Retarder system (where fitted or required)	Visual inspection	(a) Insecure connectors or mountings.(b) System defective.
1.1.20.	Automatic operation of trailer brakes	Disconnect brake coupling between trailer and drawing vehicle	Brake does not apply automatically when coupling disconnected.
1.2. Se	ervice brake perform	ance and efficiency	
1.2.1.	Performance	During a road test with a decelerometer and/or test on a static brake testing machine, apply the brakes progressively up to maximum effort	 (a) Inadequate braking effort on one or more wheels. (b) Braking effort from any wheel is less than the percentage of maximum effort recorded from the other wheel on the same axle specified in Regulations. Or in the case of testing on the road, the vehicle deviates excessively from a straight line. (c) No gradual variation in brake effort (grabbing) (d) Abnormal lag in brake operation of any wheel (e) Excessive fluctuation of brake effort due to distorted disc or oval drum.
1.2.2.	Efficiency	Test with a static brake-testing machine or by a road test using either an indicating or recording decelerometer. Goods vehicles should, if possible be tested laden. If this is not possible: (i) For air brakes, measure braking effort and line pressure up to the point of wheel slip and extrapolate to obtain an indication of brake effort when vehicle is laden; (ii) for hydraulic brakes, measure the braking effort at pedal pressures up to point of wheel slip and extrapolate to obtain braking effort for laden vehicle. <u>Note</u> : The efficiency of overrun brakes can be checked by applying the handbrake with the trailer on a static brake test machine.	Does not give a least the minimum figure laid down in the Regulations.

Item	Method	Principal reasons for rejection			
1.3. Secondary (emerge	1.3. Secondary (emergency) brake performance and efficiency (if met by separate system)				
1.3.1. Performance	During a road test with a decelerometer and/or a test on a static brake testing machine, apply the brakes progressively up to maximum effort	 (a) Brake inoperative on one side. (b) Braking effort from any wheel in less than the percentage of maximum effort recorded from the other wheel on the same axle specified in Regulations. Or in the case of testing on the road, the vehicle deviates excessively from a straight line. (c) No gradual variation in brake effort (grabbing). 			
1.3.2. Efficiency	 Test with a static brake testing machine or by a road test using either an indicating or recording decelerometer. Goods vehicles should, if possible be tested laden. If this is not possible: (i) For air brakes, measure braking effort and line pressure up to the point of wheel slip and extrapolate to obtain an indication of brake effort when vehicle is laden; (ii) For hydraulic brakes, measures up to point of wheel slip and extrapolate to obtain an indication of brake effort at pedal pressures up to point of wheel slip and extrapolate to obtain braking effort at pedal pressures up to point of wheel slip and extrapolate to obtain braking effort for laden vehicle. 	Does not give at least the minimum figure laid down in the Regulations.			
1.4. Parking brake perform	nance and efficiency				
1.4.1. Performance	Apply the brake during a road test with a decelerometer and/or a test on a static brake testing matching and/or with the vehicle on a slope of known gradient.	Brake inoperative on one side.			
1.4.2. Efficiency	Test with a static brake testing machine or by a road test using either an indicating or recording decelerometer. Goods vehicles should, if possible, be tested laden.	Does not give at least the minimum figure laid down in the Regulations.			
1.5. Retarder or exhaust be	rake system performance				
	Test with a static brake testing machine capable of more than 5 km/h or by a road test using either an indicating or recording decelerometer.	 (a) No gradual variation of efficiency (not applicable to exhaust brake systems). (b) System defective. 			

	Item	Method		Principal reasons for rejection	
1.6.	Anti-lock braking				
		Visual inspection of warning device.	(a) (b)	Warning device malfunctioning. System defective.	
2.1	Mechanical condition				
2.1.1.	Steering gear condition	With the vehicle over a pit or on a hoist and with the road wheels off the ground, rotate the steering wheel from lock to lock. Visual inspection of the operation of the steering gear.	(a) (b) (c) (d)	Roughness in operation of gear. Sector shaft twisted or splines worn. Excessive wear in sector shaft. Excessive "end float" of sector shaft.	
2.1.2.	Steering gear casing attachment	With vehicle on a pit or hoist and the mass of the vehicle road wheels on the ground, rotate steering wheel clockwise and anti-clockwise. Visual inspection of the attachment of gear casing to chassis.	(a) (b) (c) (d)	Steering gear casing moving at attachment. Elongated fixing holes in chassis. Missing or fractured fixing bolts. Steering gear casing fractured.	
2.1.3.	Steering linkage condition	With the vehicle over a pit or on a hoist and with the road wheel on ground, rock steering wheel clockwise and anti-clockwise. Visual inspection of steering components for wear, fractures and security.	 (a) (b) (c) (d) (e) (e) 	Relative movement between components which should be fixed. Excessive wear at joints. Fractures or deformation of any component. Absence of locking devices. Misalignment of components (e.g. track rod or drag link). Any repairs by welding, heating or brazing.	
2.1.4.	Steering linkage operation	With the vehicle over a pit or on a hoist and with the road wheels on ground and the engine running, rotate steering wheel from lock to lock. Visual inspection of movement of linkages.	(a) (b)	Moving steering linkage fouling a fixed part of chassis. Steering stops not operating.	
2.1.5.	Power steering	Check steering system for leaks and hydraulic fluid reservoir level (if visible). With the road wheels on ground and with the engine running, check that the power steering system is operating.	(a) (b) (c) (d) (e)	Fluid leak Insufficient fluid. Mechanism not working. Mechanism fractured or insecure. Misalignment or fouling of components.	
2.2.	2.2. Steering wheel and column				
2.2.1.	Steering wheel condition	With the road wheels on the ground, rock steering wheel from side to side at right angles to column and apply slight downward and upward pressure. Visual inspection of play.	(a) (b) (c)	Relative movement between steering wheel and column indicating looseness. Absence of retaining device on steering wheel hub. Fracture or looseness of steering wheel hub, rim or spokes.	

Item	Method	Principal reasons for rejection
2.2.2. Steering column	With the vehicle over a pit or on a hoist and the mass of the vehicle on the ground, push and pull the steering wheel in line with column, push steering wheel in various directions at right angles to the column. Visual inspection of play and condition of flexible couplings or universal joints.	 (a) Excessive movement of centre of steering wheel up or down. (b) Excessive movement of top of column radially from axis of column. (c) Deteriorated flexible coupling.
2.3. Steering play		
	With the vehicle over a pit or on a hoist and the mass of the vehicle on the road-wheels and with the road-wheels in the straight-ahead position, lightly turn the steering wheel clockwise and anti-clockwise as far as possible without moving the road wheels. Visual inspection of free movement.	Excessive free play in steering. For example, movement of a point on the rim exceeding one fifth of the diameter of the steering wheel.
2.4. Wheel alignment (X)		
	Check alignment of steered wheels with suitable equipment.	Alignment not in accordance with vehicle manufacturer's data.
	3. VISIBIL	ПТҮ
3.1. Field of vision		
	Visual inspection from driving seat.	Obstruction within drivers' field of view that materially affects his view in front or to the sides.
3.2. Condition of glass		
	Visual inspection.	 (a) Cracked or discoloured glass or transparent panel (if permitted). (b) Glass or transparent panel that does not comply with specifications in the Regulations. (c) Glass or transparent panel in unacceptable condition.
3.3. Rear-view mirror		
	Visual inspection.	 (a) Mirror missing or not fitted according to the Regulations. (b) A mirror not giving an adequate view to the rear. (c) Mirror loose or insecure.
3.4. Windscreen wipers		
	Visual inspection and by operation.	(a) Wipers not operating.(b) Wiper blades not sweeping sufficient area of windscreen or sweeping too slowly.

	Item	Method	Principal reasons for rejection
3.5. V	Vindscreen washers		
		Visual inspection and by operation.	(a) Washers not operating.(b) Washer liquid not directed to appropriate part of windscreen.
	4.	LAMPS, REFLECTORS AND EL	LECTRICAL EQUIPMENT
4.1	Headlamps		
4.1.1.	Condition and operation	Visual inspection and by operation.	 (a) Defective bulb. (b) Defective lens. (c) Lamp not of an approved type (without e.g. E marking).
4.1.2.	Alignment	Determine the horizontal and vertical aim of each headlamp on both main and dipped beam using a headlamp aiming device.	Aim of a headlamp not within limits laid down in the Regulations.
4.1.3.	Switching	Visual inspection and by operation.	Number of headlamps illuminated at the same time not in accordance with the Regulations.
4.1.4.	Intensity (X)	Determine the intensity of each headlamp with an intensity meter.	Intensity not within limits specified in the Regulations.
4.1.5.	Colour (X)	Visual inspection and by operation.	Colour not in accordance with the Regulations.
4.2.	Front and rear positio	n (side) lamps	
4.2.1.	Condition and operation	Visual inspection and by operation.	 (a) Defective bulb. (b) Defective lens. (c) Lamps not of an approved type (without e.g. E marking).
4.2.2.	Compliance with the Regulations	Visual inspection and by operation.	Colour, position or intensity not in accordance with the requirements of the Regulations.
4.3.	Stop Lamps		
4.3.1.	Condition and operation	Visual inspection and by operation.	 (a) Defective bulb. (b) Defective lens. (c) Lamp not of an approved type (without e.g. E marking).
4.3.2.	Compliance with the Regulations	Visual inspection and by operation.	Colour, position or intensity not in accordance with the requirements of the Regulations.
4.4.	Direction indicator lar	nps	
4.4.1.	Condition and operation	Visual inspection and by operation.	 (a) Defective lens. (b) Lamps not of an approved type. (c) Defective bulb.
4.4.2.	Compliance with the Regulations.	Visual inspection and by operation.	Not in accordance with the Regulations.

	Item	Method	Principal reasons for rejection
4.4.3.	Switching	Visual inspection and by operation.	 (a) Switching of lamps not in accordance with Regulations. (b) Any provision for special switching of direction indicators (e.g. all indicators flashing) not operating satisfactorily.
4.4.4.	Flashing frequency	Visual inspection and by operation.	Rate of flashing not in accordance with Regulations.
4.5.	Front and rear fog lan	ips	
4.5.1.	Condition and operation	Visual inspection and by operation.	 (a) Defective lens. (b) Lamp not of an approved type. (c) Defective bulb.
4.5.2.	Compliance with Regulations.	Visual inspection and by operation.	 (a) A lamp fitted which contravenes the Regulations. (b) Lamp operation which contravenes the Regulations. (c) Total intensity too high.
4.6.	Reversing lamps (X)		
4.6.1.	Condition and operation	Visual inspection and by operation.	 (d) Defective lens. (e) Lamp not of an approved type. (f) Defective bulb.
4.6.2.	Compliance with Regulations.	Visual inspection and by operation.	 (g) A lamp fitted which contravenes the Regulations. (h) Lamp operation which contravenes the Regulations. (i) Total intensity too high.
4.7.	Rear registration plat	e lamp	
4.7.1.	Condition and operation	Visual inspection and by operation.	(a) Lamps throwing light to the rear.(b) Defective bulb.
4.7.2.	Compliance with Regulations	Visual inspection and by operation.	Not in accordance with the Regulations.
4.8.	Retro-reflectors		
4.8.1.	Condition	Visual inspection.	 (a) Reflecting equipment defective or damaged. (b) Reflector not of an approved type (without e.g. E marking).
4.8.2.	Compliance with Regulations	Visual inspection .	Not in accordance with Regulations.
4.9.	Tell-tales		
4.9.1.	Condition and operation	Visual inspection and by operation.	Not operating.
4.9.2.	Compliance with Regulations	Visual inspection and by operation.	Not in accordance with Regulations.
4.10.	Electrical connections	between drawing vehicle and tr	ailer or semi-trailer
		Visual inspection : if possible examine the electrical continuity between the vehicles.	 (a) Wiring insecure or not adequately secured. (b) Damaged or deteriorated insulation. (c) Trailer or towing vehicle electrical connections not functioning correctly.

	Item	Method		Principal reasons for rejection		
4.11.	1.11. Electrical wiring					
		Visual inspection with vehicle over a pit or on a hoist, including in the engine compartment in some cases.	(a) (b)	Wiring insecure or not adequately secured. Damaged or deteriorated insulation.		
4.12.	Non obligatory lamps					
		Visual inspection and by operation.	(a) (b) (c)	A lamp fitted that contravenes the Regulations. Lamp operation that contravenes the Regulations. Total intensity too high.		
		5. AXLES WHEELS, TYRE	S AND	SUSPENSION		
5.1.	Axles					
5.1.1.	Axles	Visual inspection with vehicle over a pit or on a hoist, using wheel play detectors for vehicles over 3.5 tonnes gvm.	(a) (b) (c)	Fracture or deformation of axle. Insecure fixing to vehicle. Repairs by welding, heating or brazing.		
5.1.2.	Stub axles	 Visual inspection with vehicle over a pit or on a hoist, using wheel play detectors for vehicle over 3.5 tonnes gvm. Rock each wheel and note the amount of movement - (i) Between the axle beam and stub-axle: (ii) Of the wheel relative to the stub-axle. Lift the wheel from the bottom and note the amount of upward movement of the stub axle. 	(a) (b) (c) (d)	Excessive wear in the swivel pin and/or bushes. Excessive play or noise in a wheel bearing. Excessive lift between stub axle and axle beam. Stub axle pin loose in axle.		
5.2.	Wheels and tyres					
5.2.1.	Roads wheel hub	Visual inspection.	Any v	wheel nuts or studs missing or loose.		
5.2.2.	Wheels	Visual inspection of both sides of each wheel with vehicle over a pit or on a hoist.	(a) (b) (c)	Any fracture or welding defect Tyre retaining rings not properly fitted. Wheel badly distorted.		
5.2.3.	Tyres	Visual inspection of the entire tyre by either rotating the road wheel with it off the ground and the vehicle over a pit or on a hoist or by rolling the vehicle backwards and forwards over a pit.	 (a) (b) (c) (d) (e) 	Tyre of insufficient capacity to carry load on each axle (for goods vehicles over 3.5 tonnes gvm and large passenger carrying vehicles only). Tyres on same axle or on twin wheels of different sizes. Tyres on same axle of different construction (radial or diagonal). Any damage or cut to tyre. Tyre tread depth not in accordance with the Regulations.		

	Item	Method	Principal reasons for rejection
5.3.	Suspension		
5.3.1.	Springs	Visual inspection with vehicle over a pit or on a hoist.	(j) Insecure attachment of springs to chassis or axle.(k) A damaged or fractured spring component.
5.3.2.	Shock absorbers	Visual inspection with vehicle over a pit or on a hoist or using special equipment, if available.	 (a) Insecure attachment of shock absorber to chassis or axle. (b) Damaged shock absorber.
5.3.3.	Torque tubes, radius arms, wishbones and suspension arms	Visual inspection with vehicle over a pit or on a hoist, using wheel play detectors for vehicles over 3.5 tonnes gvm.	 (c) Insecure attachment of component to chassis or axle. (d) A damaged or fractured component.
5.3.4.	Suspension joints	Visual inspection with vehicle over a pit or on a hoist, using wheel play detectors for vehicles over 3.5 tonnes gvm.	Excessive wear in swivel pin and/or bushes or at suspension joints.
		6. CHASSIS AND CHASSI	S ATTACHMENTS
6.1.	Chassis or frame and	attachments	
6.1.1.	General condition	Visual inspection with vehicle over a pit or on a hoist.	 (a) Fracture or deformation of any side or cross member. (b) Insecurity of strengthening plates or fastenings. (c) Excessive corrosion which affects the rigidity of the assembly.
6.1.2.	Exhaust pipes and silencers	Visual inspection with vehicle over a pit or on a hoist.	 (a) Insecure or leaking exhaust system. (b) Silencer not functioning efficiently. (c) Fumes entering cab or passenger compartment.
6.1.3.	Fuel tank and pipes (including heating fuel tank and pipes)	Visual inspection with vehicle over a pit or on a hoist.	 (a) Insecure tank or pipes (b) Leaking fuel or missing effective filler cap. (c) Damaged or chafed pipes (d) Fuel stop-cock (if required) not operating correctly. (e) Fire risk due to leaking fuel fuel tank or exhaust improperly shielded engine compartment condition (f) Any special requirement for liquid gas fuel not met.
6.1.4.	Bumper and rear underrun devices (X)	Visual inspection.	 (a) A loose or damaged bumper (damage likely to cause injury). (b) Rear underrun device obviously not in compliance with Regulations.
6.1.5.	Spare wheel carrier (if fitted)	Visual inspection.	(a) Any fracture or deformation in carrier.(b) A spare wheel not securely fixed in carrier.

Item	Method	Principal reasons for rejection
6.1.6. Coupling devices	Visual inspection for wear and correct operation with special attention to any safety device fitted.	 (a) Excessive wear in a component. (b) Insecurity of coupling to chassis. (c) any safety device missing or not operating correctly. (d) Any indicator not working.
6.1.7. Transmission	Visual inspection.	 (a) Loose or missing securing bolts. (b) Excessive wear in transmission shaft bearings. (c) Excessive wear in universal joints. (d) Deteriorated flexible couplings. (e) A damaged or bent shaft. (f) Bearing housing fractured or insecure.
6.1.8. Engine mounting	s Visual inspection not necessarily on a pit or hoist.	Deteriorated, loose or fractured mountings.
6.1.9. Tipping gear (X)	Visual inspection.	Hydraulic fluid leak.
6.2. Cab and bodywork	k	
6.2.1. Condition	Visual inspection over a pit or on a hoist.	 (a) General condition unsatisfactory, e.g. body panels damaged to such an extent that it would be dangerous to carry a load/passengers. (b) Insecure body pillars. (c) Leaks permitting entry of water or smoke.
6.2.2. Mounting	Visual inspection over a pit or on a hoist.	 (a) Body or cab insecure. (b) Body/cab obviously not located squarely on chassis. (c) Insecure or missing fixing of body/cab to chassis or cross members. (d) Excessive corrosion at fixing points on integral bodies.
6.2.3. Doors and door catches	Visual inspection.	 (a) A door will not open or close properly. (b) A door likely to open inadvertently or one that will not remain closed. (c) Hinges, catches, pillar loose or deteriorated.
6.2.4. Floor	Visual inspection.	Floor insecure or badly deteriorated.
6.2.5. Driver's seat	Visual inspection.	 (a) A loose seat or seat with defective structure. (b) Adjustment mechanism not functioning correctly.
6.2.6. Other seats	Visual inspection.	Seats in defective condition or insecure.
6.2.7. Driving controls	Visual inspection and by operation.	Any control necessary for the safe operation of the vehicle not in good working order or which does not carry out the function for which it is provided.
6.2.8. Cab steps	Visual inspection.	Step or step ring insecure or condition likely to cause injury to users.
6.2.9. Other interior and exterior fittings	Visual inspection.	Not in accordance with Regulations.
6.2.10. Mudguards (wings), spray suppression devi	Visual inspection.	 (a) Missing, loose or badly corroded. (b) Insufficient clearance for road wheel.

	Item	Method	Principal reasons for rejection
		7. OTHER EQ	UIPMENT
7.1.	Safety belts		
7.1.1.	Security of mounting	Visual inspection.	Anchorage point badly deteriorated.
7.1.2.	Condition	Visual inspection.	 (a) Mandatory safety-belt missing or not fitted. (b) Safety-belt damaged. (c) Safety-belt without approval mark.
7.2.	Fire extinguisher (X)		
		Visual inspection.	(a) Missing.(b) Not in accordance with the Regulations.
7.3.	Locks and anti-theft d	evice (X)	
		Visual inspection and by operation.	Device not functioning to prevent vehicle being driven.
7.4.	Warning triangle (if r	equired) (X)	
		Visual inspection.	Missing or incomplete.
7.5.	First aid kit (if require	ed) (X)	
		Visual inspection.	Missing, incomplete or not in accordance with the Regulations.
7.6.	Wheel chocks (if requ	ired) (X)	
		Visual inspection.	Missing or not in good condition.
7.7.	Audible warning devic	ce	
		Visual inspection and by operation.	(a) Horn not working.(b) Control insecure or not conveniently placed.
7.8.	Speedometer		
		Visual inspection or by operation during road test.	(a) Not fitted or not operational when required by the Regulations.(b) Not capable of being illuminated.
7.9.	Tachograph		
		Visual inspection	 (a) Tachograph not operating/not fitted when required by the Regulations. (b) Defective or missing seals. (c) Calibration plaque missing, illegible or out of date.

	Item	Method	Principal reasons for rejection	
7.10.	Speed limitation devi	ce		
		Visual inspection and by operation if equipment available.	 (a) Not fitted or not operational when required by Regulations. (b) Incorrect set speed (if checked). (c) Defective or missing seals. (d) Calibration plaque missing, illegible or out of date. 	
7.11.	Battery			
		Visual inspection.	 (a) Insecure. (b) Leaking. (c) Defective switch (if required). (d) Defective fuses (if required). 	
		8. NUISAN	NCE	
8.1.	Noise			
		Evaluate subjectively or measure sound level in accordance with Regulations.	Noise level excessive or exceeds limits specified in Regulations for vehicle type.	
8.2.	Exhaust emissions	-		
8.2.1.	Positive-ignition engines	Measure gaseous emissions using an exhaust gas analyser in accordance with Regulations.	 (a) Any gaseous emission exceeds levels specified in Regulations for vehicle type. (b) Emission control equipment absent or obviously defective. 	
8.2.2.	Compression- ignition engines.	Measure opacity using an opacity meter in accordance with Regulations.	Opacity greater than levels specified in Regulations for vehicle type.	
8.3.	Radio-interference (2	X)		
		Visual inspection	Any requirement of Regulations not met.	
	9. SU	PPLEMENTARY TESTS FOR PU	BLIC TRANSPORT VEHICLES	
9.1.	Doors			
9.1.1.	Entrance and exit doors	Visual inspection and by operation.	 (a) Defective operation. (b) Deteriorated condition. (c) Defective emergency control. (d) Remote control of doors or warning devices defective. 	
9.1.2.	Emergency exits	Visual inspection and by operation.	 (a) Defective operation. (b) Emergency door signs missing or illegible. (c) Missing hammer to break glass. 	
9.2.	Demisting and defro	sting system (X)	-	
		Visual inspection and by operation.	 (a) Not operating correctly. (b) Emissions of toxic gas. (c) Defective defrosting (is compulsory). 	

	Item	Method	Principal reasons for rejection		
9.3. Ventilation system (X)					
		Visual inspection and by operation.	Defective operation.		
9.4.	Seats				
9.4.1.	Passenger seats	Visual inspection.	 (a) Seats in defective condition or insecure. (b) Folding seats, if allowed, not folding automatically. 		
9.4.2.	Driver's seat (additional requirements)	Visual inspection.	 (a) Defective special devices such as anti-glare shield or anti-dazzle screen. (b) Insecure protection for driver. 		
9.5.	Lighting and destination devices (X)				
		Visual inspection and by operation.	Device defective or not in accordance with the Regulations.		
9.6.	Gangways, standing areas				
		Visual inspection.	(a) Insecure floor.(b) Defective rails or grab handles.		
9.7.	Stairs and steps				
		Visual inspection.	Deteriorated condition.		
9.8.	Passenger communication system (X)				
		Visual inspection.	 (a) Defective signal. (b) Defective stop sign or warning device for driver. 		
9.9.	Notices (X)				
		Visual inspection.	Missing, erroneous or illegible notice.		
9.10.	Regulations regarding	g the transport of children			
9.10.1.	Doors	Visual inspection.	Protection of doors not in accordance with the Regulations for this form of transport.		
9.10.2.	Signalling	Visual inspection.	Signalling absence or not in accordance with the Regulations.		
9.11.	Special equipment				
9.11.1	. Installations for food preparation (X)	Visual inspection.	 (a) Installation not in accordance with the Regulations. (b) Installation damaged to such an extent that it would be dangerous to use it. 		
9.11.2.	. Sanitary installations (X)	Visual inspection.	Installation not in accordance with the Regulations.		