Submitted by the Co-Chairs of the IWG on PTI

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Agenda item 7.2

Proposal for amendments to ECE/TRANS/WP.29/2016/88

The text reproduced below was prepared by the experts of the Informal Working Group (IWG) on Periodic Technical Inspection (PTI) ~~to harmonize the provisions of Rule No. 2 with those of the latest Regulations annexed to the 1958 Agreement and the European Union (EU) Directives.~~ It is based on ECE/TRANS/WP.29/201~~3~~**6**/~~133~~**88**~~/Rev.1.~~ The amendments to this document are marked in bold for new and strikethrough for deleted characters. **They are intended to exclude editorial typos.**

In ECE/TRANS/WP.29/2013/133,

Item 2.4 of document, amend to read:

2.4. "*Wheeled vehicle*" means motor vehicles of categories **M1**, M2, M3, **N1**, N2 and N3, **and trailers of categories O3 and O4*** used in international transport

Item 3 of the document, amend to read:

Vehicle Categories	***Maximum** Inspection Intervals*
Passenger-carrying motor **vehicles: M1, except taxis and ambulances** **Goods vehicles: N1**	**Four years after the first entry into service of the first registration and every ~~second~~ two years thereafter**
Passenger-carrying motor vehicles: M1 used as taxi or ambulances, M2 and M3 Goods vehicles: N2 and N3 **Trailers: O3 and O4**	One year after the first **entry into service of the first** registration and annually thereafter~~.~~

Chapter 3 of the Annex, amend to read:

"3. Contents and methods of testing; assessment of deficiencies of vehicles

The test shall cover at least the items, and use the minimum standards and the recommended methods, listed in the following table.
For each vehicle system and component subject to testing, the assessment of deficiencies shall be carried out in accordance with the criteria set out in that table, on a case-by-case basis. ~~**Deficiencies not listed in this annex shall be assessed in terms of the risks that they pose to road safety.**~~

* **As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.4, para. 2. - www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html**

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
0. Identification of the vehicle					
0.1. Registration number plates (if needed by requirements[(1)])	Visual inspection	(a) Number plate(s) missing or so insecurely fixed that it is (they are) likely to fall off.		X	
		(b) Inscription missing or illegible		X	
		(c) Not in accordance with vehicle documents or records.		X	
0.2. Vehicle identification/chassis/serial number	Visual inspection	(a) Missing or can not be found.		X	
		(b) Incomplete, illegible, obviously falsified, or does not match the vehicle documents.		X	
		(c) Illegible vehicle documents or clerical inaccuracies.	X		
1. Braking equipment					
1.1. Mechanical condition and operation					
1.1.1. Service brake pedal/hand lever pivot	Visual inspection of the components while the braking system is operated. Note: Vehicles with power-assisted braking systems should be inspected with the engine switched off.	(a) Pivot too tight.		X	
		(b) Excessive wear or play.		X	
1.1.2. Pedal/hand lever condition and travel of the brake operating device	Visual inspection of the components while the braking system is operated Note: Vehicles with power-assisted braking systems should be	(a) Excessive or insufficient reserve travel.		X	
		(b) Brake control not releasing correctly. If its functionality is affected.	X	 X	
		(c) Anti-slip provision on brake pedal missing, loose or worn smooth.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
	inspected with the engine switched off.				
1.1.3. Vacuum pump or compressor and reservoirs	Visual inspection of the components at normal working pressure. Check time required for vacuum or air pressure to reach safe working value and function of warning device, multi-circuit protection valve and pressure relief valve.	(a) Insufficient pressure/vacuum to give assistance for at least four brake applications after the warning device has operated (or gauge shows an unsafe reading);		X	
		for at least two brake applications after the warning device has operated (or gauge shows an unsafe reading).			X
		(b) Time taken to build up air pressure/vacuum to safe working value is too long according to the requirements[(1)]		X	
		(c) Multi-circuit protection valve or pressure relief valve not working.		X	
		(d) Air leak causing a noticeable drop in pressure or audible air leaks.		X	
		(e) External damage likely to affect the function of the braking system.		X	
		Secondary braking performance not met.			X
1.1.4. Low pressure warning gauge or indicator	Functional check	Malfunctioning or defective gauge or indicator.	X		
		Low pressure not identifiable.		X	
1.1.5. Hand-operated brake control valve	Visual inspection of the components while the braking system is operated.	(a) Control cracked, damaged or excessively worn.		X	
		(b) Control insecure on valve or valve insecure.		X	
		(c) Loose connections or leaks in system.		X	
		(d) Unsatisfactory operation.		X	
1.1.6. Parking brake activator, lever control, parking brake ratchet, electronic parking brake	Visual inspection of the components while the braking system is operated.	(a) Ratchet not holding correctly.		X	
		(b) Wear at lever pivot or in ratchet mechanism.	X		
		Excessive wear.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(c) Excessive movement of lever indicating incorrect adjustment.		X	
		(d) Activator missing, damaged or inoperative.		X	
		(e) Incorrect functioning, warning indicator shows malfunction		X	
1.1.7. Braking valves (foot valves, unloaders, governors)	Visual inspection of the components while the braking system is operated.	(a) Valve damaged or excessive air leak.		X	
		If its functionality is affected.			X
		(b) Excessive oil discharge from compressor.	X		
		(c) Valve insecure or inadequately mounted.		X	
		(d) Hydraulic fluid discharge or leak.		X	
		If its functionality is affected.			X
1.1.8. Couplings for trailer brakes (electrical & pneumatic)	Disconnect and reconnect braking system coupling between towing vehicle and trailer.	(a) Tap or self sealing valve defective.	X		
		If its functionality is affected.		X	
		(b) Tap or valve insecure or inadequately mounted.	X		
		If its functionality is affected.		X	
		(c) Excessive leaks.		X	
		If its functionality is affected.			X
		(d) Not functioning correctly.		X	
		Operation of brake affected.			X
1.1.9. Energy storage reservoir pressure tank	Visual inspection.	(a) Tank slightly damaged or slightly corroded .	X		
		Tank heavily damaged, corroded or leaking.		X	
		(b) Drain device operation affected.	X		
		Drain device inoperative.		X	
		(c) Tank insecure or inadequately mounted.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
1.1.10. Brake servo units, master cylinder (hydraulic systems)	Visual inspection of the components while the braking system is operated, if possible.	(a) Defective or ineffective servo unit.		X	
		If it is not operating.			X
		(b) Master cylinder defective but brake still operating.		X	
		Master cylinder defective or leaking.			X
		(c) Master cylinder insecure but brake still operating.		X	
		Master cylinder insecure.			X
		(d) Insufficient brake fluid below MIN mark	X		
		Brake fluid significantly below MIN mark		X	
		No brake fluid visible.			X
		(e) Master cylinder reservoir cap missing.	X		
		(f) Brake fluid warning light illuminated or defective.	X		
		(g) Incorrect functioning of brake fluid level warning device.	X		
1.1.11. Rigid brake pipes	Visual inspection of the components while the braking system is operated, if possible.	(a) Imminent risk of failure or fracture.			X
		(b) Pipes or connections leaking (air brake systems).		X	
		Pipes or connection leaking (hydraulic brake systems).			X
		(c) Pipes damaged or excessively corroded.		X	
		Affecting the functioning of the brakes on account of blocking or imminent risk of leaking.			X
		(d) Pipes misplaced.	X		
		Risk of damage.		X	
1.1.12. Flexible brake hoses	Visual inspection of the components while the braking system is operated,	(a) Imminent risk of failure or fracture.			X
		(b) Hoses damaged, chafing, twisted or too short.	X		
		Hoses damaged or chafing.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
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	if possible.	(c) Hoses or connections leaking (air brake systems)		X	
		Hoses or connections leaking (hydraulic brake systems).			X
		(d) Hoses bulging under pressure.		X	
		Cord impaired.			X
		(e) Hoses porous.		X	
1.1.13. Brake linings and pads	Visual inspection.	(a) Lining or pad excessively worn (minimum mark reached).		X	
		Lining or pad excessively worn (minimum mark not visible).			X
		(b) Lining or pad contaminated (oil, grease etc.).		X	
		Braking performance affected.			X
		(c) Lining or pad missing or wrongly mounted.			X
1.1.14. Brake drums, brake discs	Visual inspection.	(a) Drum or disc worn		X	
		Drum or disc excessively worn, excessively scored, cracked, insecure or fractured.			X
		(b) Drum or disc contaminated (oil, grease, etc.).		X	
		Braking performance affected.			X
		(c) Drum or disc missing.			X
		(d) Back plate insecure.		X	
1.1.15. Brake cables, rods, levers, linkages	Visual inspection of the components while the braking system is operated, if possible.	(a) Cable damaged or knotted.		X	
		Braking performance affected.			X
		(b) Component excessively worn or corroded.		X	
		Braking performance affected.			X
		(c) Cable, rod or joint insecure.		X	
		(d) Cable guide defective.		X	
		(e) Restriction to free movement of the braking system.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(f) Abnormal movement of the levers/linkage indicating maladjustment or excessive wear.		X	
1.1.16. Brake actuators (including spring brakes or hydraulic cylinders)	Visual inspection of the components while the braking system is operated, if possible.	(a) Actuator cracked or damaged.		X	
		Braking performance affected.			X
		(b) Actuator leaking.		X	
		Braking performance affected.			X
		(c) Actuator insecure or inadequately mounted.		X	
		Braking performance affected.			X
		(d) Actuator excessively corroded.		X	
		Likely to crack.			X
		(e) Insufficient or excessive travel of operating piston or diaphragm mechanism.		X	
		Braking performance affected (lack of reserve movement).			X
		(f) Dust cover damaged.	X		
		Dust cover missing or excessively damaged.		X	
1.1.17. Load sensing valve	Visual inspection of the components while the braking system is operated, if possible.	(a) Defective linkage.		X	
		(b) Linkage incorrectly adjusted.		X	
		(c) Valve seized or inoperative (ABS functioning).		X	
		Valve seized or inoperative.			X
		(d) Valve missing (if required).			X
		(e) Missing data plate.	X		
		(f) Data illegible or not in accordance with requirements[(1)]	X		
1.1.18. Slack adjusters and indicators	Visual inspection.	(a) Adjuster damaged, seized or having abnormal movement, excessive wear or incorrect adjustment.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(b) Adjuster defective.		X	
		(c) Incorrectly installed or replaced.		X	
1.1.19. Endurance braking system (where fitted or required)	Visual inspection.	(a) Insecure connectors or mountings.	X		
		If its functionality is affected.		X	
		(b) System obviously defective or missing.		X	
1.1.20. Automatic operation of trailer brakes	Disconnect brake coupling between towing vehicle and trailer.	Trailer brake does not apply automatically when coupling disconnected.			X
1.1.21. Complete braking system	Visual inspection	(a) Other system devices (e.g. anti-freeze pump, air dryer, etc.) ~~D~~damaged externally or excessively corroded in a way that adversely affects the braking system.		X	
		Braking performance affected.			X
		(b) Leakage of air or anti-freeze.	X		
		System functionality affected.		X	
		(c) Any component insecure or inadequately mounted.		X	
		(d) Unsafe modification to any component [(3)]		X	
		Braking performance affected.			X
1.1.22. Test connections (where fitted or required)	Visual inspection	(a) Missing.		X	
		(b) Damaged.	X		
		Unusable or leaking.		X	
1.1.23. Overrun brake	Visual inspection and by operation	Insufficient efficiency.		X	

Item		*Method*	*Reasons for failure*	*Assessment of deficiencies*		
				Minor	*Major*	*Dangerous*
1.2	Service braking performance and efficiency					
1.2.1.	Performance	During a test on a brake tester or, if impossible, during a road test, apply the brakes progressively up to maximum effort.	(a) Inadequate braking effort on one or more wheels.		X	
			No braking effort on one or more wheels.			X
			(b) Braking effort from any wheel is less than 70% of the maximum effort recorded from the other wheel on the same axle. Or, in the case of testing on the road, the vehicle deviates excessively from a straight line.		X	
			Braking effort from any wheel is less than 50% of the maximum effort recorded from the other wheel on the same axle in the case of steered axles.			X
			(c) No gradual variation in brake effort (grabbing).		X	
			(d) Abnormal lag in brake operation of any wheel.		X	
			(e) Excessive fluctuation of brake force during each complete wheel revolution.		X	
1.2.2.	Efficiency	Test with a brake tester or, if one cannot be used for technical reasons, by a road test using a deceleration recording instrument to establish the braking ratio which relates to the maximum authorised mass or, in the case of semi-trailers, to the sum	Does not give at least the minimum figure as follows[‡]:			
			1. Vehicles registered for the first time after 1/1/2012:		X	
			– Category M_1: 58 %			
			– Categories M_2 and M_3: 50 %			
			– Category N_1: 50 %			
			– Categories N_2 and N_3: 50 %			
			– Categories ~~O_2~~, O_3 and O_4:			
			- for semi-trailers: 45 %[‡]			
			- for draw-bar trailers: 50 %			

~~[‡] *The vehicle categories which are outside the scope of this Directive are included for guidance.*~~

[‡] ***43 % for semi-trailers approved before 1 January 2012.***

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
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	of the authorised axle loads. Vehicles or a trailer with a maximum permissible mass exceeding 3,5Tonnes has to be inspected following the standards given by ISO 21069 or equivalent methods. Road tests should be carried out under dry conditions on a flat, straight road.	2. Vehicles registered for the first time before 1/1/2012: – Categories M_1, M_2 and M_3: 50 % § – Category N_1: 45 % – Categories N_2 and N_3: 43 % ** – Categories ~~O_2~~,O_3 and O_4: 40 % †† ~~3. Other categories~~ ~~Categories L (both brakes together):~~ ~~Category l1e: 42 %~~ ~~Categories l2e, l6e: 40 %~~ ~~Category l3e: 50 %~~ ~~Category l4e: 46 %~~ ~~Categories l5e, l7e: 44 %~~ ~~Category L (rear wheel brake):~~ ~~all categories: 25 % of the total vehicle mass~~ Less than 50% of the above values reached.		X X	 X
1.3.	Secondary (emergency) braking performance and efficiency (if met by separate system)				
1.3.1. Performance	If the secondary braking system is separate from the service braking system, use the method specified in 1.2.1.	(a) Inadequate braking effort on one or more wheels. No braking effort on one or more wheels.		X	 X
		(b) Braking effort from any wheel is less than 70 % of the maximum effort recorded from another wheel on the same axle specified. Or, in the case of testing on the road, the vehicle deviates excessively from a straight line. Braking effort from any wheel is less than 50 % of the		X	 X

§ 48 % for vehicles not fitted with ABS or type-approved before 1 October 1991.

** 45 % for vehicles registered after 1988 or from the date specified in requirements, whichever is the later.

†† 43 % for semi-trailers and draw-bar trailers registered after 1988 or from the date specified in requirements, whichever is the later.

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		maximum effort recorded from the other wheel on the same axle in the case of steered axles.			
		(c) No gradual variation in brake effort (grabbing).		X	
1.3.2. Efficiency	If the secondary braking system is separate from the service braking system, use the method specified in 1.2.2.	Braking effort less than 50 %[1] of the service brake performance defined in section 1.2.2 in relation to the maximum authorized mass.		X	
		Less than 50 % of the above braking effort values reached.			X
1.4. Parking braking performance and efficiency					
1.4.1. Performance	Apply the brake during a test on a brake tester.	Brake inoperative on one side or, in the case of testing on the road, the vehicle deviates excessively from a straight line.		X	
		Less than 50 % of the braking effort values as referred to in point 1.4.2. Reached in relation to the vehicle mass during testing.			X
1.4.2. Efficiency	Test with a brake tester. If not possible, then by a road test using either an indicating or deceleration recording instrument or with the vehicle on a slope of known gradient .	Does not give, for all vehicles, a braking ratio of at least 16 % in relation to the maximum authorized mass or, for motor vehicles, of at least 12 % in relation to the maximum authorised combination mass of the vehicle, whichever is the greater.		X	
		Less than 50 % of the above braking effort values reached.			X
1.5. Endurance braking system performance	Visual inspection and, where possible, test whether the system functions.	(a) No gradual variation of efficiency (not applicable to exhaust brake systems).		X	
		(b) System not functioning.		X	

[1] E.g. 2.5 m/s2 for N1, N2 and N3 vehicles registered for the first time after 1.1.2012.

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
1.6. Anti-lock braking system (ABS)	Visual inspection and inspection of warning device and/or using electronic vehicle interface.	(a) Warning device malfunctioning.		X	
		(b) Warning device shows system malfunction.		X	
		(c) Wheel speed sensors missing or damaged.		X	
		(d) Wirings damaged.		X	
		(e) Other components missing or damaged.		X	
		(f) System indicates failure via the electronic vehicle interface.		X	
1.7 Electronic brake system (EBS)	Visual inspection and inspection of warning device and/or using electronic vehicle interface.	(a) Warning device malfunctioning.		X	
		(b) Warning device shows system malfunction.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
1.8 Brake fluid	Visual inspection	Brake fluid contaminated or sedimented.		X	
		Imminent risk of failure.			X
2. Steering					
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 or on turntables, rotate the steering wheel from lock to lock. Visual inspection of the operation of the steering gear.	(a) Roughness in operation of gear.		X	
		(b) Sector shaft twisted or splines worn.		X	
		Affecting functionality.			X
		(c) Excessive wear in sector shaft.		X	
		Affecting functionality.			X
		(d) Excessive movement of sector shaft.		X	
		Affecting functionality.			X
		(e) Leaking.	X		
		Formation of drops.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
2.1.2. Steering gear casing attachment	With vehicle on a pit or hoist and the weight of the vehicle road wheels on the ground, rotate steering / handle bar wheel clockwise and anticlockwise or using a specially adapted wheel play detector. Visual inspection of the attachment of gear casing to chassis.	(a) Steering gear casing not properly attached.		X	
		Attachments dangerously loose or relative movement to chassis/bodywork visible.			X
		(b) Elongated fixing holes in chassis.		X	
		Attachments seriously affected.			X
		(c) Missing or fractured fixing bolts.		X	
		Attachments seriously affected.			X
		(d) Steering gear casing fractured.		X	
		Stability or attachment of casing affected.			X
2.1.3. Steering linkage condition	With the vehicle over a pit or on a hoist and with the road wheel on the ground, rock steering wheel clockwise and anti-clockwise or using a specially adapted wheel play detector. Visual inspection of steering components for wear, fractures and security.	(a) Relative movement between components which should be fixed.		X	
		Excessive movement or likely to unlink.			X
		(b) Excessive wear at joints.		X	
		A very serious risk of unlinking.			X
		(c) Fractures or deformation of any component.		X	
		Affecting function.			X
		(d) Absence of locking devices.		X	
		(e) Misalignment of components (e.g. Track rod or drag link).		X	
		(f) Unsafe modification [(3)].		X	
		Affecting function.			X
		(g) Dust cover damaged or deteriorated.	X		
		Dust cover missing or severely deteriorated.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
2.1.4. Steering linkage operation	With the vehicle over a pit or on a hoist and with the road wheel on the ground, rock steering wheel clockwise and anti-clockwise or using a specially adapted wheel play detector. Visual inspection of steering components for wear, fractures and security.	(a) Moving steering linkage fouling a fixed part of the chassis.		X	
		(b) Steering stops not operating or missing.		X	
2.1.5. Power steering	Check steering system for leaks and hydraulic fluid reservoir level (if visible). With the road wheels on the ground and with the engine running, check that the power steering system is operating.	(a) Fluid leak or functions affected.		X	
		(b) Insufficient fluid (below MIN mark).	X		
		Insufficient reservoir.		X	
		(c) Mechanism not working.		X	
		Steering affected.			X
		(d) Mechanism fractured or insecure.		X	
		Steering affected.			X
		(e) Misalignment or fouling of components.		X	
		Steering affected.			X
		(f) Unsafe modification [(3)].		X	
		Steering affected.			X
		(g) Cables/hoses damaged, excessively corroded.		X	
		Steering affected.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
2.2. Steering wheel, column and handle bar					
2.2.1. Steering wheel/handle bar condition	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/handle bar in various directions at right angles to the column/forks . Visual inspection of play, and condition of flexible couplings or universal joints.	(a) Relative movement between steering wheel and column indicating looseness.		X	
		Very serious risk of unlinking.			X
		(b) Absence of retaining device on steering wheel hub.		X	
		Very serious risk of unlinking.			X
		(c) Fracture or looseness of steering wheel hub, rim or spokes.		X	
		Very serious risk of unlinking.			X
2.2.2. Steering column/yokes and forks and steering dampers	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/handle bar in various directions at right angles to the column/forks. Visual inspection of play, and condition of flexible couplings or universal joints.	(a) Excessive movement of centre of steering wheel up or down.		X	
		(b) Excessive movement of top of column radially from axis of column.		X	
		(c) Deteriorated flexible coupling.		X	
		(d) Attachment defective.		X	
		Very serious risk of unlinking.			X
		(e) Unsafe modification [(3)]			X

Item		*Method*	*Reasons for failure*	*Assessment of deficiencies*		
				Minor	*Major*	*Dangerous*
2.3.	Steering play	With the vehicle over a pit or on a hoist, the mass of the vehicle on the road wheels, the engine, if possible, running for vehicles with power steering 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.	Free play in steering excessive (for example, movement of a point on the rim exceeding one fifth of the diameter of the steering wheel or not in accordance with the requirements(1). Safe steering affected.		X	X

~~[1] "Requirements" are laid down by type-approval at the date of approval, first registration or first entry into service as well as by retrofitting obligations or by national legislation in the country of registrations. These reasons for failure apply only when compliance with requirements has been checked.~~

~~[2] (*) identifies items which relate to the condition of the vehicle and its suitability for use on the road but which are not considered essential in a periodical inspection~~

~~[3] Unsafe modifications means a modification that adversely affects the road safety of the vehicle or has a disproportionately adverse effect on the environment.~~

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
2.4. Wheel alignment (X)[2]	Check alignment of steered wheels with suitable equipment.	Alignment not in accordance with vehicle manufacturer's data or requirements[1].	X		
		Straight on driving affected; directional stability impaired.		X	
2.5. Trailer steered axle turntable	Visual inspection or using a specially adapted wheel play detector	(a) Component slightly damaged.		X	
		Component heavily damaged or cracked.			X
		(b) Excessive play.		X	
		Straight on driving affected; directional stability impaired.			X
		(c) Attachment defective.		X	
		Attachment seriously affected.			X
2.6. Electronic Power Steering (EPS)	Visual inspection and consistency check between the angle of the steering wheel and the angle of the wheels when switching on/off the engine, and/or using the electronic vehicle interface	(a) EPS malfunction indicator lamp (MIL) indicates any kind of failure of the system.		X	
		(b) Inconsistency between the angle of the steering wheel and the angle of the wheels.		X	
		Steering affected.			X
		(c) Power assistance not working.		X	
		(d) System indicates failure via the electronic vehicle interface.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
3. Visibility					
3.1. Field of vision	Visual inspection from driving seat.	Obstruction within driver's field of view that materially affects his view in front or to the sides (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
3.2. Condition of glass	Visual inspection.	(a) Cracked or discoloured glass or transparent panel (if permitted) (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
		(b) Glass or transparent panel (including reflecting or tinted film) that does not comply with specifications in the requirements[(1)], (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
		(c) Glass or transparent panel in unacceptable condition.		X	
		Visibility through inside cleaning area of windscreen wipers heavily affected.			X
3.3. Rear-view mirrors or devices	Visual inspection.	(a) Mirror or device missing or not fitted according to the requirements[(1)] (at least two rear-view devices available).		X	
		Fewer than two rear-view devices available.		X	
		(b) Mirror or device slightly damaged or loose.	X		
		Mirror or device inoperative, heavily damaged, loose or insecure.		X	
		(c) Necessary field of vision not covered.		X	
3.4. Windscreen wipers	Visual inspection and by operation.	(a) Wipers not operating or missing or not in accordance with the requirements [(1)]		X	
		(b) Wiper blade defective.	X		

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		Wiper blade missing or obviously defective.		X	
3.5. Windscreen washers	Visual inspection and by operation.	Washers not operating adequately (lack of washing fluid but pump operating or water-jet misaligned).	X		
		Washers not operating.		X	
3.6 Demisting system (X)[(2)]	Visual inspection and by operation.	System inoperative or obviously defective.	X		
4. Lamps, reflectors and electrical equipment					
4.1. Headlamps					
4.1.1. Condition and operation	Visual inspection and by operation.	(a) Defective or missing light / light source.(multiple light / light sources; in the case of LED, up to 1/3 not functioning).	X		
		Single light / light sources; in the case of LED, seriously affected visibility.		X	
		(b) Slightly defective projection system (reflector and lens).	X		
		Heavily defective or missing projection system (reflector and lens).		X	
		(c) Lamp not securely attached.		X	
4.1.2. Alignment	Determine the horizontal aim of each headlamp on dipped beam using a headlamp aiming device or using the electronic vehicle interface.	(a) Aim of a headlamp not within limits laid down in the requirements[(1)].		X	
		(b) System indicates failure via the electronic vehicle interface.		X	
4.1.3. Switching	Visual inspection and by operation or using the electronic vehicle	(a) Switch does not operate in accordance with the requirements[(1)] (Number of headlamps illuminated at the same time)	X		
		Maximum permitted light brightness to the front exceeded.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
	interface	(b) Function of control device impaired.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
4.1.4. Compliance with requirements(1).	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[(1)].		X	
		(b) Products on lens or light source which obviously reduce light brightness or change emitted colour.		X	
		(c) Light source and lamp not compatible.		X	
4.1.5. Levelling devices (where mandatory)	Visual inspection and by operation, if possible, or using the electronic vehicle interface.	(a) Device not operating.		X	
		(b) Manual device cannot be operated from driver's seat.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
4.1.6. Headlamp cleaning device (where mandatory)	Visual inspection and by operation if possible.	Device not operating.	X		
		In the case of gas-discharging lamps.		X	
4.2. Front and rear position lamps, side marker lamps, end outline marker lamps and daytime running lamps					
4.2.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source.		X	
		(b) Defective lens.		X	
		(c) Lamp not securely attached.	X		
		Very serious risk of falling off.		X	
4.2.2 Switching	Visual inspection and by operation.	(a) Switch does not operate in accordance with the requirements[(1).]		X	
		Rear position lamps and side marker lamps can be switched off when headlamps are on.		X	
		(b) Function of control device impaired.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
4.2.3. Compliance with requirements[(1)]	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[(1).]	X		
		Red light to the front or white light to the rear; heavily reduced light brightness.		X	
		(b) Products on lens or light source which reduce light, brightness or change emitted colour.	X		
		Red light to the front or white light to the rear; heavily reduced light brightness.		X	
4.3. Stop Lamps					
4.3.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source(multiple light source in the case of LED up to 1/3 not functioning).	X		
		Single light sources; in the case of LED less than 2/3 functioning.		X	
		All light sources not functioning.			X
		(b) Slightly defective lens (no influence on emitted light).	X		
		Heavily defective lens (emitted light affected).		X	
		(c) Lamp not securely attached.	X		
		Very serious risk of falling off.		X	
4.3.2. Switching	Visual inspection and by operation or using the electronic vehicle interface.	(a) Switch does not operate in accordance with the requirements[(1).]	X		
		Delayed operation.		X	
		No operation at all.			X
		(b) Function of control device impaired.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
		(d) Emergency brake light functions fail to operate, or do not operate correctly.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
4.3.3. Compliance with requirements(1).	Visual inspection and by operation.	Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[(1).]	X		
		White light to the rear; heavily reduced light brightness.		X	
4.4. Direction indicator and hazard warning lamps					
4.4.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source (multiple light source in the case of LED up to 1/3 not functioning).	X		
		Single light sources; in the case of LED less than 2/3 functioning.		X	
		(b) Slightly defective lens (no influence on emitted light).	X		
		Heavily defective lens (emitted light affected).		X	
		(c) Lamp not securely attached.	X		
		Very serious risk of falling off.		X	
4.4.2. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements[(1).]	X		
		No operation at all.		X	
4.4.3. Compliance with requirements(1).	Visual inspection and by operation.	Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[(1).]		X	
4.4.4. Flashing frequency	Visual inspection and by operation.	Rate of flashing not in accordance with the requirements[(1).](frequency more than 25% deviating).	X		
4.5. Front and rear fog lamps					
4.5.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source. (multiple light source in the case of LED up to 1/3 not functioning).	X		
		Single light sources; inthe case of LED less than 2/3 functioning.		X	
		(b) Slightly defective lens (no influence on emitted light).	X		
		Heavily defective lens (emitted light affected).		X	
		(c) Lamp not securely attached.	X		

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		Very serious risk of falling off or dazzling oncoming traffic.		X	
4.5.2 Alignment (X)[2]	By operation and using a headlamp aiming device	Front fog lamp out of horizontal alignment when the light pattern has cut-off line (cut-off line too low).	X		
		Cut-off line above that for dipped beam headlamps.		X	
4.5.3. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements[1].	X		
		Not operative.		X	
4.5.4. Compliance with requirements[1].	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[1]		X	
		(b) System does not operate in accordance with the requirements[1]		X	
4.6. Reversing lamps					
4.6.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source.	X		
		(b) Defective lens.	X		
		(c) Lamp not securely attached.	X		
		Very serious risk of falling off.		X	
4.6.2. Compliance with requirements[1]	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements[1].		X	
		(b) System does not operate in accordance with the requirements[1].		X	
4.6.3. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements[1].	X		
		Reversing lamp can be switched on with gear not in reverse position.		X	
4.7. Rear registration plate lamp					
4.7.1. Condition and operation	Visual inspection and by operation.	(a) Lamp throwing direct or white light to the rear.	X		
		(b) Defective light source. (Multiple light source).	X		
		Defective light source. (Single light source).		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(c) Lamp not securely attached.	X		
		Very serious risk of falling off.		X	
4.7.2. Compliance with requirements[(1)]	Visual inspection and by operation.	System does not operate in accordance with the requirements[(1)].	X		
4.8. Retro-reflectors, conspicuity (retro reflecting) markings and rear marking plates					
4.8.1. Condition	Visual inspection.	(a) Reflecting equipment defective or damaged.	X		
		Reflecting affected.		X	
		(b) Reflector not securely attached.	X		
		Likely to fall off.		X	
4.8.2. Compliance with requirements[(1)]	Visual inspection.	Device, reflected colour or position not in accordance with the requirements[(1)].	X		
		Missing or reflecting red colour to the front or white colour to the rear.		X	
4.9. Tell-tales mandatory for lighting equipment					
4.9.1. Condition and operation	Visual inspection and by operation.	Not operating.	X		
		Not operating for main beam headlamp or rear fog lamp.		X	
4.9.2. Compliance with requirements[(1)]	Visual inspection and by operation.	Not in accordance with the requirements[(1)].	X		
4.10. Electrical connections between towing vehicle and trailer or semi-trailer	Visual inspection: if possible examine the electrical continuity of the connection.	(a) Fixed components not securely attached.	X		
		Loose socket.		X	
		(b) Damaged or deteriorated insulation.	X		
		Likely to cause a short-circuit fault.		X	
		(c) Trailer or towing vehicle electrical connections not functioning correctly.		X	
		Trailer brake lights not working at all.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
4.11. Electrical wiring	Visual inspection with vehicle over a pit or on a hoist, including inside the engine compartment (if applicable).	(a) Wiring insecure or not adequately secured.	X		
		Fixings loose, touching sharp edges, connectors likely to be disconnected.		X	
		Wiring likely to touch hot parts, rotating parts or the ground, connectors disconnected (relevant parts for braking, steering).			X
		(b) Wiring slightly deteriorated.	X		
		Wiring heavily deteriorated.		X	
		Wiring extremely deteriorated (relevant parts for braking, steering).			X
		(c) Damaged or deteriorated insulation.	X		
		Likely to cause a short-circuit fault.		X	
		Imminent risk of fire, formation of sparks.			X
4.12. Non obligatory lamps and retro-reflectors (X)[(2)]	Visual inspection and by operation.	(a) A lamp/retro-reflector fitted not in accordance with the requirements[(1)].	X		
		Emitting/reflecting red light to the front or white light to the rear.		X	
		(b) Lamp operation not in accordance with the requirements[(1)].	X		
		Number of headlights simultaneously operating exceeding permitted light brightness; Emitting red light to the front or white light to the rear.		X	
		(c) Lamp/retro-reflector not securely attached.	X		
		Very serious risk of falling off.		X	
4.13. Battery(ies)	Visual inspection.	(a) Insecure.	X		
		Not properly attached; likely to cause a short-circuit fault.		X	
		(b) Leaking.	X		
		Loss of hazardous substances.		X	
		(c) Defective switch (if required).		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(d) Defective fuses (if required).		X	
		(e) Inappropriate ventilation (if required).		X	
5. Axles, wheels, tyres and suspension					
5.1. Axles					
5.1.1. Axles	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Axle fractured or deformed.			X
		(b) Insecure fixing to vehicle.		X	
		Stability impaired, functionality affected: Extensive movement relative to its fixtures.			X
		(c) Unsafe modification[(3)].		X	
		Stability impaired, functionality affected, insufficient clearance to other vehicle parts or to the ground.			X
5.1.2. Stub axles	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes. Apply a vertical or lateral force to each wheel and note the amount of movement between the axle beam and stub axle.	(a) Stub axle fractured.			X
		(b) Excessive wear in the swivel pin and/or bushes.		X	
		Likelihood of loosening; directional stability impaired.			X
		(c) Excessive movement between stub axle and axle beam.		X	
		Likelihood of loosening; directional stability impaired.			X
		(d) Stub axle pin loose in axle.		X	
		Likelihood of loosening; directional stability impaired.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
5.1.3. Wheel bearings	Visual inspection with the vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes. Rock the wheel or apply a lateral force to each wheel and note the amount of upward movement of the wheel relative to the stub axle.	(a) Excessive play in a wheel bearing.		X	
		Directional stability impaired; danger of demolishment.			X
		(b) Wheel bearing too tight, jammed.		X	
		Danger of overheating; danger of demolishment.			X
5.2. Wheels and tyres					
5.2.1. Road wheel hub	Visual inspection.	(a) Any wheel nuts or studs missing or loose.		X	
		Missing fixing or loose to an extent which very seriously affects road safety.			X
		(b) Hub worn or damaged.		X	
		Hub worn or damaged in such a way that secure fixing of wheels is affected.			X
5.2.2. Wheels	Visual inspection of both sides of each wheel with vehicle over a pit or on a hoist.	(a) Any fracture or welding defect.			X
		(b) Tyre retaining rings not properly fitted.		X	
		Likely to come off.			X
		(c) Wheel badly distorted or worn.		X	
		Secure fixing to hub affected; secure fixing of tyre affected.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(d) Wheel size, technical design, compatibility or type not in accordance with the requirements[(1)]and affecting road safety.		X	
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) Tyre size, load capacity, approval mark or speed category not in accordance with the requirements[(1)] and affecting road safety.		X	
		Insufficient load capacity or speed category for actual use, tyre touches other fixed vehicle parts impairing safe driving.			X
		(b) Tyres on same axle or on twin wheels of different sizes.		X	
		(c) Tyres on same axle of different construction (radial / cross-ply).		X	
		(d) Any serious damage or cut to tyre.		X	
		Cord visible or damaged.			X
		(e) Tyre tread wear indicator becomes exposed.		X	
		Tyre tread depth not in accordance with the requirements[(1)].			X
		(f) Tyre rubbing against other components (flexible anti spray devices).	X		
		Tyre rubbing against other components (safe driving not impaired)		X	
		(g) Re-grooved tyres not in accordance with requirements[(1).]		X	
		Cord protection layer affected.			X
		(h) Tyre pressure monitoring system malfunctioning or tyre obviously underinflated.	X		
		Obviously inoperative.		X	
5.3. Suspension system					
5.3.1. Springs and stabiliser	Visual inspection with vehicle over a pit or on a	(a) Insecure attachment of springs to chassis or axle.		X	
		Relative movement visible. fixings very seriously loose.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
	hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(b) A damaged or fractured spring component. Main spring (-leaf), or additional leafs very seriously affected.		X 	 X
		(c) Spring missing Main spring (-leaf), or additional leafs very seriously affected.		X 	 X
		(d) Unsafe modification [(3)] Insufficient clearance to other vehicle parts; spring system inoperative.		X 	 X
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 absorbers to chassis or axle. Shock absorber loose.	X 	 X	
		(b) Damaged shock absorber showing signs of severe leakage or malfunction.		X	
5.3.2.1 Efficiency testing of damping (X)[(2)]	Use special equipment and compare left /right differences	(a) Significant difference between left and right.		X	
		(b) Given minimum values not reached.		X	
5.3.3. Torque tubes, radius arms, wishbones and suspension arms	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Insecure attachment of component to chassis or axle. Likelihood of loosening; directional stability impaired.		X 	 X
		(b) A damaged or excessively corroded component. Stability of component affected or component fractured.		X 	 X
		(c) Unsafe modification[(3)]. Insufficient clearance to other vehicle parts; system inoperative.		X 	 X
5.3.4.Suspension joints	Visual inspection with vehicle over a pit or on a	(a) Excessive wear in swivel pin and/or bushes or at suspension joints.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
	hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	Likelihood of loosening; directional stability impaired.			X
		(b) Dust cover severely deteriorated.	X		
		Dust cover missing or fractured.		X	
5.3.5. Air suspension	Visual inspection	(a) System inoperable.			X
		(b) Any component damaged, modified or deteriorated in a way that would adversely affect the functioning of the system.		X	
		Functioning of system seriously affected.			X
		(c) Audible system leakage.		X	
6. Chassis and chassis 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) Slight fracture or deformation of any side or cross-member.		X	
		Serious fracture or deformation of any side or cross-member.			X
		(b) Insecurity of strengthening plates or fastenings.		X	
		Majority of fastenings loose; insufficient strength of parts.			X
		(c) Excessive corrosion which affects the rigidity of the assembly.		X	
		Insufficient strength of parts.			X
6.1.2. Exhaust pipes and silencers	Visual inspection with vehicle over a pit or on a hoist.	(a) Insecure or leaking exhaust system.		X	
		(b) Fumes entering cab or passengers compartment.		X	
		Danger to health of persons on board.			X
6.1.3. Fuel tank and pipes (including heating	Visual inspection with vehicle over	(a) Insecure tank or pipes, creating particular risk of fire.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
fuel tank and pipes)	a pit or on a hoist, use of leak detecting devices in the case of LPG/CNG/LNG systems.	(b) Leaking fuel or missing or ineffective filler cap.		X	
		Risk of fire; excessive loss of hazardous material.			X
		(c) Chafed pipes.	X		
		Damaged pipes.		X	
		(d) Fuel stopcock (if required) not operating correctly.		X	
		(e) Fire risk due to: – leaking fuel; – fuel tank or exhaust not properly shielded; – engine compartment condition.			X
		(f) LPG/CNG/LNG or hydrogen system not in accordance with requirements; any part of the system defective [(1)]			X
6.1.4. Bumpers, lateral protection and rear underrun devices	Visual inspection.	(a) Looseness or damage likely to cause injury when grazed or contacted.		X	
		Parts likely to fall off; functionality heavily affected.			X
		(b) Device obviously not in compliance with the requirements[(1)]		X	
6.1.5. Spare wheel carrier (if fitted)	Visual inspection.	(a) Carrier not in proper condition	X		
		(b) Carrier fractured or insecure.		X	
		(c) A spare wheel not securely fixed in carrier		X	
		Very serious risk of falling off.			X
6.1.6. . Mechanical coupling and towing device	Visual inspection for wear and correct operation with special attention to any safety device	(a) Component damaged, defective or cracked (if not in use).		X	
		Component damaged, defective or cracked (if in use)			X
		(b) Excessive wear in a component.		X	
		Below wear limit.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
	fitted and /or use of measuring gauge.	(c) Attachment defective.		X	
		Any attachment loose with a very serious risk of falling off.			X
		(d) Any safety device missing or not operating correctly.		X	
		(e) Any coupling indicator not working.		X	
		(f) Obstruct registration plate or any lamp (when not in use)	X		
		Registration plate not readable (when not in use).		X	
		(g) Unsafe modification[(3)](secondary parts).		X	
		Unsafe modification[(3)](primary parts).			X
		(h) Coupling too weak.		X	
6.1.7. Transmission	Visual inspection.	(a) Loose or missing securing bolts		X	
		Loose or missing securing bolts to such an extent that road safety is seriously endangered.			X
		(b) Excessive wear in transmission shaft bearings.		X	
		Very serious risk of loosening or cracking.			X
		(c) Excessive wear in universal joints or transmission chains/belts.		X	
		Very serious risk of loosening or cracking.			X
		(d) Deteriorated flexible couplings.		X	
		Very serious risk of loosening or cracking.			X
		(e) A damaged or bent shaft.		X	
		(f) Bearing housing fractured or insecure.		X	
		Very serious risk of loosening or cracking.			X
		(g) Dust cover severely deteriorated.	X		
		Dust cover missing or fractured.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(h) Illegal power-train modification.		X	
6.1.8. Engine mountings	Visual inspection not necessarily on a pit or hoist.	Deteriorated, obviously and severely damaged mountings.		X	
		Loose or fractured mountings.			X
6.1.9 Engine performance (X) [(2)]	Visual inspection and/or using electronic interface	(a) Control unit modified affecting safety and/or the environment.		X	
		(b) Engine modification affecting safety and/or the environment.			X
6.2. Cab and bodywork					
6.2.1. Condition	Visual inspection	(a) A loose or damaged panel or part likely to cause injury.		X	
		Likely to fall off.			X
		(b) Insecure body pillar.		X	
		Stability impaired.			X
		(c) Permitting entry of engine or exhaust fumes.		X	
		Danger to health of persons on board.			X
		(d) Unsafe modification[(3)].		X	
		Insufficient clearance to rotating or moving parts and road.			X
6.2.2. Mounting	Visual inspection over a pit or on a hoist.	(a) Body or cab insecure.		X	
		Stability affected.			X
		(b) Body/cab obviously not located squarely on chassis.		X	
		(c) Insecure or missing fixing of body/cab to chassis or cross-members and if symmetrical		X	
		Insecure or missing fixing of body/cab to chassis or cross-members to such an extent that road safety is very seriously endangered.			X
		(d) Excessive corrosion at fixing points on integral bodies.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		Stability impaired.			X
6.2.3. Doors and door catches	Visual inspection.	(a) A door will not open or close properly.		X	
		(b) A door likely to open inadvertently or one that will not remain closed (sliding doors).		X	
		A door likely to open inadvertently or one that will not remain closed (turning doors).			X
		(c) Door, hinges, catches or pillar deteriorated.	X		
		Door, hinges, catches or pillar missing or loose.		X	
6.2.4. Floor	Visual inspection over a pit or on a hoist.	Floor insecure or badly deteriorated.		X	
		Insufficient stability.			X
6.2.5. Driver's seat	Visual inspection.	(a) Seat with defective structure.		X	
		Loose seat.			X
		(b) Adjustment mechanism not functioning correctly.		X	
		Seat moving or backrest not fixable.			X
6.2.6 Other seats	Visual inspection.	(a) Seats in defective condition or insecure (secondary parts).	X		
		Seats in defective condition or insecure (main parts).		X	
		(b) Seats not fitted in accordance with requirements[(1)].	X		
		Permitted number of seats exceeded; positioning not in compliance with approval.		X	
6.2.7. Driving controls	Visual inspection and by operation.	Any control necessary for the safe operation of the vehicle not functioning correctly.		X	
		Safe operation affected.			X
6.2.8. Cab steps	Visual inspection.	(a) Step or step rung insecure.	X		
		Insufficient stability.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(b) Step or rung in a condition likely to cause injury to users.		X	
6.2.9. Other interior and exterior fittings and equipment	Visual inspection.	(a) Attachment of other fitting or equipment defective.		X	
		(b) Other fitting or equipment not in accordance with the requirements[(1).].	X		
		Parts fitted likely to cause injuries; safe operation affected.		X	
		(c) Leaking hydraulic equipment.	X		
		Extensive loss of hazardous material.		X	
6.2.10. Mudguards (wings), spray suppression devices	Visual inspection.	(a) Missing, loose or badly corroded.	X		
		Likely to cause injuries; likely to fall off.		X	
		(b) Insufficient clearance to tyre/wheel (spray suppression).	X		
		Insufficient clearance to tyre/wheel (mudguards).		X	
		(c) Not in accordance with the requirements[(1).].	X		
		Insufficient coverage of tread.		X	
7. Other equipment					
7.1. Safety-belts/buckles and restraint systems					
7.1.1. Security of safety-belts/buckles mounting	Visual inspection.	(a) Anchorage point badly deteriorated.		X	
		Stability affected.			X
		(b) Anchorage loose.		X	
7.1.2. Condition of safety-belts/buckles.	Visual inspection and by operation.	(a) Mandatory safety-belt missing or not fitted.		X	
		(b) Safety-belt damaged.	X		
		Any cut or sign of overstretching.		X	
		(c) Safety-belt not in accordance with the requirements[(1).]		X	
		(d) Safety-belt buckle damaged or not functioning correctly.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(e) Safety-belt retractor damaged or not functioning correctly.		X	
7.1.3. Safety belt load limiter	Visual inspection, and/or using electronic interface	(a) Load limiter obviously missing or not suitable with the vehicle.		**X**	
		(b) System indicates failure via the electronic vehicle interface.		~~**X**~~	**X**
7.1.4. Safety belt Pre-tensioners	Visual inspection, and/or using electronic interface	(a) Pre-tensioner obviously missing or not suitable with the vehicle.		X	
		(b) System indicates failure via the electronic vehicle interface.		~~**X**~~	**X**
7.1.5. Airbag	Visual inspection, and/or using electronic interface	(a) Airbags obviously missing or not suitable with the vehicle.		X	
		(b) System indicates failure via the electronic vehicle interface.		~~**X**~~	**X**
		(c) Airbag obviously non-operative.		X	
7.1.6. SRS Systems	Visual inspection of MIL, and/or using electronic interface	(a) SRS MIL indicates any kind of failure of the system.		X	
		(b) System indicates failure via the electronic vehicle interface.		~~**X**~~	**X**
7.2. Fire extinguisher (X)[2]	Visual inspection.	(a) Missing.		X	
		(b) Not in accordance with the requirements[1]	X		
		If required (e.g. taxi, buses, coaches, etc).		X	
7.3. Locks and anti-theft device	Visual inspection and by operation	(a) Device not functioning to prevent vehicle being driven.	X		
		(b) Defective		X	
		Inadvertently locking or blocking.			X
7.4. Warning triangle (if required) (X)[2]	Visual inspection.	(a) Missing or incomplete.	X		
		(b) Not in accordance with the requirements[1].	X		

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
7.5. First aid kit. (if required) (X)[2]	Visual inspection.	Missing, incomplete or not in accordance with the requirements[1].	X		
7.6. Wheel chocks (wedges) (if required) (X)[2]	Visual inspection.	Missing or not in good condition, insufficient stability or dimension.		X	
7.7. Audible warning device	Visual inspection and by operation	(a) Not working properly.	X		
		Not working at all.		X	
		(b) Control insecure.	X		
		(c) Not in accordance with the requirements[1].	X		
		Emitted sound likely to be confused with official sirens.		X	
7.8. Speedometer	Visual inspection or by operation during road test or by electronical means.	(a) Not fitted in accordance with the requirements[1]..	X		
		Missing (if required).		X	
		(b) Operation impaired.	X		
		Not operational at all.		X	
		(c) Not capable of being sufficiently illuminated.	X		
		Not capable of being illuminated at all.		X	
7.9. Tachograph (if fitted/required)	Visual inspection.	(a) Not fitted in accordance with the requirements[1]..		X	
		(b) Not operational.		X	
		(c) Defective or missing seals.		X	
		(d) Installation plaque missing, illegible or out of date.		X	
		(e) Obvious tampering or manipulation.		X	
		(f) Size of tyres not compatible with calibration parameters.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
7.10. Speed limitation device (if fitted/required)	Visual inspection and by operation if equipment available.	(a) Not fitted in accordance with the requirements[(1)].		X	
		(b) Obviously not operational.		X	
		(c) Incorrect set speed (if checked).		X	
		(d) Defective or missing seals.		X	
		(e) Plaque missing or illegible.		X	
		(f) Size of tyres not compatible with calibration parameters.		X	
7.11 Odometer if available (X)[(2)]	Visual inspection, and/or using electronic interface	(a) Obviously manipulated (fraud) to reduce or misrepresent the vehicle's distance record.		X	
		(b) Obviously inoperative.		X	
7.12 Electronic Stability Control (ESC) if fitted/required	Visual inspection, and/or using electronic interface	(a) Wheel speed sensors missing or damaged.		X	
		(b) Wirings damaged.		X	
		(c) Other components missing or damaged.		X	
		(d) Switch damaged or not functioning correctly.		X	
		(e) ESC MIL indicates any kind of failure of the system.		X	
		(f) System indicates failure via the electronic vehicle interface.		X	
8. Supplementary tests for passenger-carrying vehicles categories M_2, M_3					
8.1. Doors					
8.1.1 Entrance and exit doors	Visual inspection and by operation.	(a) Defective operation.		X	
		(b) Deteriorated condition.	X		
		Likely to cause injuries.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(c) Defective emergency control.		X	
		(d) Remote control of doors or warning devices defective.		X	
		(e) Not in accordance with the requirements[(1).]	X		
		Insufficient door width.		X	
8.1.2 Emergency exits	Visual inspection and by operation (where appropriate)	(a) Defective operation.		X	
		(b) Emergency exits signs illegible.	X		
		Emergency exits signs missing.		X	
		(c) Missing hammer to break glass.	X		
		(d) Not in accordance with requirements[(1).]	X		
		Insufficient width or access blocked.		X	
8.2. Demisting and defrosting system (X)[(2)]	Visual inspection and by operation	(a) Not operating correctly.	X		
		Affecting safe operation of the vehicle.		X	
		(b) Emission of toxic or exhaust gases into driver's or passenger compartment.		X	
		Danger to health of persons on board.			X
		(c) Defective defrosting (if compulsory).		X	
8.3. Ventilation & heating system (X)[(2)]	Visual inspection and by operation	(a) Defective operation.	X		
		Risk to health of persons on board.		X	
		(b) Emission of toxic or exhaust gases into driver's or passenger compartment.		X	
		Danger to health of persons on board.			X

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
8.4. Seats					
8.4.1 Passenger seats (including seats for accompanying personnel)	Visual inspection	Folding seats (if allowed) not working automatically.	X		
		Blocking an emergency exit.		X	
8.4.2. Driver's seat (additional requirements)	Visual inspection	(a) Defective special devices such as anti-glare shield.	X		
		Field of vision impaired.		X	
		(b) Protection for driver insecure or not in accordance with requirements[(1).]	X		
		Likely to cause injuries.		X	
8.5. Interior lighting and destination devices (X)[(2)]	Visual inspection and by operation	Device defective or not in accordance with requirements[(1).]	X		
		Not operational at all.		X	
8.6. Gangways, standing areas	Visual inspection	(a) Insecure floor.		X	
		Stability affected.			X
		(b) Defective rails or grab handles.	X		
		Insecure or un-useable.		X	
		(c) Not in accordance with the requirements[(1).]	X		
		Insufficient width or space.		X	
8.7. Stairs and steps	Visual inspection and by operation (where appropriate)	(a) Deteriorated condition.	X		
		Damaged condition.		X	
		Stability affected.			X
		(b) Retractable steps not operating correctly.		X	
		(c) Not in accordance with requirements[(1)]	X		
		Insufficient width or exceeding height.		X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
8.8. Passenger communication system (X)[2]	Visual inspection and by operation.	Defective system. Not operational at all.	X	 X	
8.9. Notices (X)[2]	Visual inspection.	(a) Missing, erroneous or illegible notice.	X		
		(b) Not in accordance with requirements[1]. False information.	X	 X	
8.10. Requirements regarding the transportation of children. (X)[2]					
8.10.1 Doors	Visual inspection	Protection of doors not in accordance with the requirements[1]. regarding this form of transport.		X	
8.10.2 Signalling and special equipment	Visual inspection	Signalling or special equipment absent or not in accordance with requirements[1]	X		
8.11. Requirements regarding the transportation of persons with reduced mobility (X)[2]					
8.11.1 Doors, ramps and lifts	Visual inspection and operation	(a) Defective operation. Safe operation affected.	X	 X	
		(b) Deteriorated condition. Stability affected; likely to cause injuries.	X	 X	
		(c) Defective control(s). Safe operation affected.	X	 X	
		(d) Defective warning device(s). Not operating at all.	X	 X	
		(e) Not in accordance with the requirements[1].		X	
8.11.2 Wheelchair restraint system	Visual inspection and by operation if appropriate	(a) Defective operation. Safe operation affected.	X	 X	
		(b) Deteriorated condition. Stability affected; likely to cause injuries.	X	 X	

Item	*Method*	*Reasons for failure*	*Assessment of deficiencies*		
			Minor	*Major*	*Dangerous*
		(c) Defective control(s). Safe operation affected.	X	 X	
		(d) Not in accordance with the requirements[(1).]		X	
8.11.3 Signalling and special equipment	Visual inspection	Signalling or special equipment absent or not in accordance with requirements[(1).]		X	
8.12. Other special equipment (X)[(2)]					
8.12.1. Installations for food preparation	Visual inspection	(a) Installation not in accordance with the requirements[(1).]		X	
		(b) Installation damaged to such an extent that it would be dangerous to use it.		X	
8.12.2.Sanitary installation	Visual inspection	Installation not in accordance with the requirements[(1).] Likely to cause injuries.	X	 X	
8.12.3.Other devices (e.g. audio-visual systems)	Visual inspection	Not in accordance with the requirements[(1).] Safe operation of vehicle affected.	X	 X	

NOTES:

(1) 'Requirements' are laid down by type-approval at the date of approval, first registration or first entry into service as well as by retrofitting obligations or ***by*** national legislation in the country of registration. These reasons for failure apply only when compliance with requirements has been checked.

(2) (X) identifies items which relate to the condition of the vehicle and its suitability for use on the road but which are not considered essential in a roadworthiness test.

(3) Unsafe modification means a modification that adversely affects the road safety of the vehicle or has a disproportionately adverse effect on the environment.