ANNEX I

MINIMUM REQUIREMENTS CONCERNING THE CONTENTS AND RECOMMENDED METHODS OF TESTING

1. GENERAL

This Annex identifies the vehicle systems and components to be tested; it details the recommended methods for testing them and the criteria to be used when determining whether the condition of the vehicle is acceptable.

The test must cover at least the items listed in point 3 below provided that these relate to the equipment of the vehicle being tested in the Member State concerned. The test may also include a verification as to whether the relevant parts and components of that vehicle correspond to the required safety and environmental characteristics that were in force at the time of approval or, if applicable, at the time of retrofitting.

Where the design of the vehicle does not allow the application of the test methods laid down in this Annex, the test shall be conducted in accordance with the recommended test methods accepted by the competent authorities. The competent authority must be satisfied that safety and environmental standards will be maintained.

Testing of all the items listed below shall be considered as mandatory in the context of a periodic roadworthiness test, with the exception of those marked with the indication 'X' which are related to the condition of the vehicle and its suitability for use on the road but which are not considered essential in the context of a roadworthiness test.

The 'Reasons for failure' do not apply in cases where they refer to requirements that were not prescribed in the relevant vehicle approval legislation at the time of first registration or first entry into service, or in the retrofitting requirements.

Where a method of testing is indicated as visual, it means that, in addition to looking at the items concerned, the inspector shall also, if appropriate, handle them, evaluate their noise or use any other appropriate means of inspection not involving the use of equipment.

2. SCOPE OF TEST

The test shall cover at least the following areas:

- (0) Identification of the vehicle;
- (1) Braking equipment;
- (2) Steering;
- (3) Visibility;
- (4) Lighting equipment and parts of the electrical system;
- (5) Axles, wheels, tyres, suspension;
- (6) Chassis and chassis attachments;
- (7) Other equipment;
- (8) Nuisance;
- (9) Supplementary tests for passenger-carrying vehicles of categories M₂ and M₃.

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.

Item	Method Reasons for failure			or Assessmen	Assessment of deficiencies		
				Minor	Major	Dangerous	
0. IDE	NTIFI	CATION OF 7	THE VEHIC	LE			
0.1.	Regis numb plates (if neede by	Visual tration er	(a) N pl m or so in fiz th it (tl ar	umber ate(s) issing securely ked at is ney e) kely	X		
			(b) In m or	scription issing	X		
			w ve de or	cordance ith chicle ocuments	X		
0.2.	Vehic identi chassi serial numb		(a) M or ca nc	in	X		

				be found	1.		
			(b)	illegi obvic falsif or does not match the vehic	usly ied, 1	X	
1. BRA	AKING	EQUIPMENT	(c)	or cleric	le ments		
		al condition a		tion			
1.1.1.	Servio brake pedal	Visual bervice prake of the components	(a)	Pivot too tight.		X	
	hand lever pivot v v v v v v v v v v v v v v v v v v	while the	(b)	Exces wear or play.	ssive	X	
1.1.2.	lever condi and	Visual inspection of the components While the braking	(a)	Excess or insuff reserv travel	ficient ve	X	
	travel of the	system is operated	(b)	Brake		X	

opera	Note: twighicles ewith power- assisted braking systems should be inspected with the engine switched off.	If its functiona is affecte (c)	Anti- slip provision on brake pedal missing, loose or worn smooth.	X	
or comp and	Visual Hispection of the components at normal working Plessure. 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); at least two brake applications after the warning device has operated (or gauge shows an unsafe reading); at least two brake applications	X	X

	operated (or gauge shows an unsafe reading).		
(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)		X	

		(e) External damage likely to affect the function of the braking system. Secondary braking performance not met.	X	X
1.1.4.	Low Functional check pressure warning gauge or indicator	MalfunctioningX or defective gauge or indicator. Low pressure not identifiable.	X	
1.1.5.	Hand- operated the brake contro- while the braking system is	(a) Control cracked, damaged or excessively worn	X	
	operated.	(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 of the	(a) Ratchet not	X	

	lever	activa teo mponents lever while the		holdi corre			
	controbraking parkingystem is brake operated. ratchet, electronic parking brake	(b) Excessiv wear.			X		
			(c)	Exces move of lever indica incor adjus	ment	X	
			(d)	Activ missi dama or inope	ng,	X	
		((e)	warni indica show	ioning, ng ator	X	
1.1.7.	Brakin valves (foot valves unload govern	Visual Inspection of the components while the braking System is operated.	(a)	Valve dama or excess air leak. If its funct is affect	ged sive ionality	X	X
			(b)	Exces oil disch from comp			

		 (c) Valve insecure or inadequately mounted. (d) Hydraulic fluid discharge or leak. If its functionality is affected. 	X X X
1.1.8.	Coupling for braking trailer brakes (electricative) brewen towing pneumatificie and trailer.	(a) Tap X or self sealing valve defective. If its functionality is affected.	X
		(b) Tap or valve insecure or inadequately mounted. If its functionality is affected.	X
		(c) Excessive leaks. If its functionality is affected.	X X
		(d) Not functioning correctly. Operation of brake affected.	X X

		Visual	(a)	Tank X	X	
.1.9.	Energ storag	Anspection.	(a)	slightly damaged		
	reserv	oir		or		
	pressu	ire		slightly		
	tank			corroded.		
				Tank		
				heavily		
				damaged, corroded		
				or		
				leaking.		
			(h)	Drain	X	
			(b)	Drain device		
				operation		
				affected.		
			Drain de			
			inoperati	ve.		
			(c)	Tank	Х	
			(0)	insecure		
				or		
				inadequately		
				mounted.		
.1.10.	Brake	Visual	(a)	Defective	X	Х
.1.10.	servo	inspection of the		or ineffective		
	units,	components		servo		
	maste	while the		unit.		
	cyline	while the Graking		If it		
	(hydra	system is		is		
	syster	nsperated, if		not		
		possible.		operating.		
			(b)	Master	X	X
				cylinder		
				defective		
				but		
				brake		
				still operating.		
			Master	oporating.		
			cylinder			
			defective	or		
			leaking.			
			(c)	Master	Х	X
				cylinder		
				insecure		
				but		

		Master cylinder insecure			
		(d) Brake flu significa below M mark No brake fluid visi	ntly IIN e ible.	X	X
		(e)	X Master cylinder reservoir cap missing.		
		(f)	Brake fluid warning light illuminated or defective.		
		(g)	X Incorrect functioning of brake fluid level warning device.		
1.1.11. Ri bra pip	yid inspection of the components while the braking system is	(a)	Imminent risk of failure or fracture.		X
	operated, if possible.	(b)	Pipes or	X	X

	connections leaking (air brake systems). Pipes or connection leaking (hydraulic brake systems).		
	(c) Pipes damaged or excessively corroded. Affecting the functioning of the brakes on account of blocking or imminent risk of leaking.	X	X
	(d) Pipes X misplaced. Risk of damage.	X	
1.1.12. Flexible brake hoses Wisual fispection of the components while the braking system is	(a) Imminent risk of failure or fracture.		X
operated, if possible.	(b) Hoses damaged, chafing, twisted or too short. Hoses damaged or chafing.	X	
	(c) Hoses or connections leaking	X	X

	c		
	Hoses bulging under pressure.	X	X
	 Hoses porous.	Х	
1.1.13. Brake inspection. linings and pads	Lining or pad excessively worn (minimum mark reached). Lining or pad excessively worn (minimum mark not visible).	X	X
	Lining or pad contaminated (oil, grease etc.). nce	X	X
	Lining or pad		X

				missing or wrongly mounted.		
1.1.14.	Brake drum brake discs		(a)	Drum or disc worn Drum or disc excessively worn, excessively scored, cracked, insecure or fractured.	X	X
			(b) Braking performa affected.	Drum or disc contaminated (oil, grease, etc.).	X	X
			(c)	Drum or disc missing.		X
			(d)	Back plate insecure.	X	
1.1.15.	rods, levers	Visual inspection of the components while the braking system is	(a)	Cable damaged or knotted. Braking performance affected.	X	X
		operated, if possible.	(b)	Component excessively worn	X	X

			Braking performa affected. (c)	Cable rod or joint	3,	X	
			(d)	insec Cable guide defec		X	
			(e)	to free		X	
			(f)	of the lever linka indic	s/ ge ating djustment ssive	X	
1.1.16.	Visual 1.1.16. Brake inspection actuators the (including ponents spring while the brakes braking or hydraul ferated, if	(a)	Actua crack or dama Braki perfo affect	ed ged. ing rmance	X	X	
	cylin	operated, if possible.	(b) Braking performa affected.	Actua leakin		X	X

			inse or inad	uator cure equately nted.	X	X
			exce	lator essively oded.	X	X
			or exce trave of oper pisto or diap	ating on hragm hanism.	X	X
			(f) Dus cove dam Dust cover missing or excessively damaged.		X	
1.1.17.	Load sensi	^{ng} f the	(a) Defe linka	ective age.	X	
	valve components while the braking system is		age rrectly sted.	Х		
		operated, if possible.	(c) Valv seize or inop		X	X

			Valve seized or inoperati		ioning).		
			(d)	Valve missi (if requi	ng		X
			(e)	Miss data plate			
			(f)	with			
1.1.18.	Slack adjus and indica	Visual inspection. ters ators	(a)	exces wear or incor	ged, d mg mal ement, sive	X	
			(b)	Adju defec	ster tive.	Х	
			(c)	Incor instal or repla		X	
1.1.19.	Endu brakin systen (when fitted	re	(a)	or mour If its	ectors ttings.	X	

	or requi	red)	is affe	cted.		
			defe or	tem iously ective sing.	Х	
1.1.20.	opera of traile	Disconnect Mathe Coupling between towing ^S vehicle and trailer.	Trailer brake does not apply automatically when coupling disconnected.			X
1.1.21.	Comj braki syster		exte or exce corr in a way that adve affe the brak syst Brai perf	em ices - ze up, er, haged mally essively oded ersely cts cts	X	X
				X kage	X	

			(c)	insec or	quately	X	
			(d) Braking performa affected.	to any comp	fe fication onent ³	X	X
1.1.22.	Test	Visual	(a)	Missi	ing.	X	
	conne (whe fitted or requi		(b) Unusable leaking.	Dama e or	X aged.	X	
1.1.23.	Over brake	Visual Hispection and by operation	Insufficie efficienc			X	
1.2. Se	rvice b	raking perforn	nance and	l effic	iency	I	
1.2.1.		During a test During a test Diff d Grake tester or, if impossible, during a road test, apply the brakes progressively up to maximum effort.	(a)		quate ng ls. ng	X	X
			(b)	Braki effort from any whee is		X	X

less than 70% of the maxim effort record from the other wheel on the same axle. Or, in the case of testing on the road,	ed		
	ed		
	cu		
	5		
the			
vehicl			
deviat excess			
from	sivery		
a			
straigh	nt		
line.			
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.			
(c) No		Х	
(c) No gradua	al		
variati	on		
in			
brake			
I	I		

		effort (grab	bing).		
		Abno lag in brake opera of any whee	tion	X	
		Exces fluctu of brake force durin each comp whee revolu	ation g lete l	X	
1.2.2. Effici	Test with a black 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 of the authorised axle loads. Vehicles or a trailer with a maximum permissible mass exceeding 3,5	ie	ered	X	

tonnes 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.		Categori O_2 , O_3 and O_4 : —	for semi- trailers: 45 % ^b for draw- bar trailers: 50 %	
	2. Vehic regis for the first time befor 1/1/2	tered re 012:	X	
	$\begin{array}{ccc} - & Categ \\ M_1, \\ M_2 \\ and \\ M_3: \\ 50 \% \\ - & Categ \\ N_1: \end{array}$			
	$\begin{array}{c} 45\% \\ \text{Categ} \\ \text{N}_2 \\ \text{and} \\ \text{N}_3: \\ 43\% \end{array}$	gories		
	$\begin{array}{c} & \text{Catc}_{4}\\ & \text{O}_{2},\\ & \text{O}_{3}\\ & \text{and}\\ & \text{O}_{4}:\\ & 40\%\end{array}$		V	V
	3. Othe catego Categories L (both brakes together):	r ories	X	X

	— Categ		
	L1e:		
	42 %		
		ories	
	L2e,		
	L6e:		
	40 %		
	— Categ		
	L3e:		
	50 %		
	— Categ	gory	
	L4e:		
	46 %		
		ories	
	L5e,		
	L7e:		
	44 %		
	Category L		
	(rear wheel		
	brake):		
	all categories:		
	25 % of the		
	total vehicle		
	mass		
	Less than		
	50 % of the		
	above values		
	reached.		
1		1	

1.3. Secondary (emergency) braking performance and efficiency (if met by separate system)

1.3.1.	Perfo	If the recordary 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	X	X

	I	i.	1
is			
less			
than			
70%			
of			
the			
maxi	mum		
effort			
recor			
from			
anoth	er		
whee			
on			
the			
same			
axle			
speci	fied		
Or,	ileu.		
in in			
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case			
of			
	a		
testin	g		
On the			
the			
road,			
the	1 -		
vehic			
devia			
	sively		
from			
a	1.		
straig	ht		
line.			
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	1		
gradu	al		
varia	ion		
in			
brake			

			effort (grab	bing).		
1.3.2.	Effic	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 % ^f of the service brake performance defined in section 1.2.2 in relation to the maximum authorized mass. Less than 50 % of the above braking effort values reached.		X	X
1.4. Pa	rking	braking perfor	mance and effic	ciency		
1.4.1.	Perfo	Apply the Bake 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. 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	X
1.4.2.	Effic	Test with a brake tester. If not possible, then by a road test using either an indicating or deceleration recording	Does not give, for all vehicles, a braking ratio of at least 16 % in relation to the maximum authorized mass or,		X	X

	instrument or with the vehicle on a slope of known gradient.	for motor vehicles, of at least 12 % in relation to the maximum authorised combination mass of the vehicle, whichever is the greater. Less than 50 % of the above braking effort values reached.			
syste	Visual Tangection Mand, where Mossible, The whether the system functions.	(not	tion iency cable ust	X	
		(b) Syste not funct	em tioning.	X	
1.6. Anti lock brak	inspection	(a) Warr devic malf		Х	
(AB	mand magnetion Mof warning device and/ or using electronic vehicle interface.	(b) Warr devic show syste malf	ce /s	X	
		(c) Whe speed sense miss or dama	d prs ing	X	

				/irings amaged.	X	
			cc m or	ther omponents issing maged.	X	
			in fa vi th el ve		X	
1.7.	syster	manection	de	Varning evice alfunctioning.	X	
	(EBS) of warning device and/ or using electronic vehicle interface.	of warning device and/ ((or using electronic vehicle	de sh sy	Varning evice lows vstem alfunction.	X	
			in fa vi th el		X	
1.8.	India	Visual inspection	Brake fluid contaminate or sedimented Imminent r of failure.	ed	X	X
2. STE		G cal condition				
2.1.1	Steer gear	With the wehicle over a pit or on to hoist and with the road wheels off the	in or of	peration	X	

ground or on turntables, rotate the steering wheel from lock to lock. Visual inspection of the operation	(b) Sector shaft twisted or splines worn. f Affecting	X	X
of the steering gear	: (c) Excessive wear in sector shaft. Affecting functionality.	X	X
	(d) Excessive movement of sector shaft. Affecting functionality.	X	X
	(e) Leaking. Formation of drops.	X	
2.1.2. Steering gear casing weight of the attach wheels on th ground, rotat steering/ handle bar wheel clockwise an anticlockwis or using a specially adapted wheel play detector.	gear casing not properly e attached. te Attachments dangerously loose or relative	X	X
Visual inspection of the attachment o gear casing t chassis.		X	X

	Attachments seriously affected. (c) Missing or fractured fixing bolts. Attachments seriously affected.	X	X
	(d) Steering gear casing fractured. Stability or attachment of casing affected.	X	X
2.1.3. Steering hicle over linkage pit or on condition of the ground, rock steering wheel clockwise and anti- clockwise or using a specially	(a) Relative movement between components which should be fixed Excessive movement or likely to unlink.	X	X
adapted wheel play detector. Visual inspection of steering components for wear, fractures and	 (b) Excessive wear at joints. A very serious risk of unlinking. 	X	X
security.	(c) Fractures or deformation of any component.	X	X

			Affecting function.	g Abser of lockir device	ıg	X	
			(e)	Misal of	ignment onents	X	
			(f) Affecting function.	5	è ication ³ .	X	X
			(g) Dust cov missing o severely deteriora	Dust cover damag or deteri er or	X ged orated.	X	
2.1.4.	Steerin linkag operat	With the Wehicle over A pit or on Phoist and with the road wheel on the ground, rock steering wheel clockwise and anti-	(a)	Movin steerin linkag foulin a fixed part of the chassi	ng ge g	X	
		clockwise or using a specially adapted wheel play detector. Visual inspection	(b)	Steeri stops not operat or missi	ting	X	

		of steering components for wear, fractures and security. Check				X	
2.1.5.	Powe steeri	rsteering system for leaks and hydraulic fluid reservoir	(a)	Fluid leak or functionaffected			
	level (if visible). With the road wheels on the ground and with the engine running, check that the power steering system is operating.	visible). With the road wheels on the ground and with the engine running,	(b) Insufficie reservoir		V	X	
		the power steering system is	(c) Steering affected.	Mecha not worki		X	X
			(d) Steering affected.	Mecha fractur or insecu	red	X	X
			(e) Steering affected.	or foulin of compo	gnment g onents.	X	X
		(f) Steering affected.		e ication ³ .	X	X	
			(g)	Cable hoses damag excess corroc	ged, sively	X	X

		Steering affected.		
2.2. Ste	ering wheel, column	and handle bar		
2.2.1.	With the Steer wheel/a pit or on a handl bar conditional the ground, push and pull the steering wheel in line with column, push steering wheel/handle	(a) Relative movement between steering wheel and column indicating looseness. Very serious risk of unlinking.	X	X
	bar in various directions at right angles to the column/ forks. Visual inspection of play, and condition of flexible couplings or universal	(b) Absence of retaining device on steering wheel hub. Very serious risk of unlinking.	X	X
	joints.	(c) Fracture or looseness of steering wheel hub, rim or spokes. Very serious risk of unlinking.	X	X
2.2.2.	With the Steering hicle over column yokes and forks and steering wheel in line	(a) Excessive movement of centre of steering wheel up	X	

	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 down (b) Excess move of top of colum radial from axis of colum	ssive ment nn ly	X	
	or universal joints.	(c) Deter flexib coupl		Х	
		(d) Attac defec Very serious risk of unlinking.	hment tive.	X	X
		(e) Unsa modi	fe fication ³		Х
2.3. Steer play	With the inghicle 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	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

	road Visus inspe of fre	out ing the wheels. al ection						
2.4.	suita	ament r eered a els with v ble r pment. c c a c s	Alignmen not in accordanc with vehic manufactu data or requireme Straight on driving affected; directiona stability mpaired.	e cle urer's ents ¹ .	X	2	X	
2.5.	Visua Trailer steered rus axle speci turntablea whee deteo	ection sing a ially ted el play		slight dama	ged. oonent ly ged	2	X	X
					sive	2	X	Χ
		l S		defec	hment tive.	2	X	Х
2.6.	Electronic Powerand Steering (EPS) check betw the a	ection (istency k	1 i] (EPS malfu indica lamp (MIL) indica)	2	X	

	the steering wheel and the angle of the wheels when switching on/off the		any kind of failur of the			
	engine, and/ or using the electronic vehicle interface	(b)	Incom betwee the angle of the steeri whee and the angle of the whee	sistency een ng l	X	X
			Powe assist not work	ance	Х	
			Syste indica failur via the electr vehic interf	ates e onic le	X	
3. VISIBILIT	Y			I]	<u> </u>
3.1. Field of vision	Visual inspection from driving seat.	Obstructi within driver's f of view th materially affects his view in fi	ield hat y s	X		

or to the sides (outside cleaning area of windscreen wipers).

			Inside cleaning area of windscreen wipers affected or outer mirrors not visible.	l	X	
3.2.	Cond of glass	Visual	or disc glas or tran pan (if perr (out clea area of	sparent el nitted) side ning dscreen ers).	X	
			of windscreen wipers affected or outer mirrors not visible.	ı		
			pand (inc refle or tinte film that does not com with spec in the requ (out	sparent el luding ecting ed) s		

			wiper area preen or rors	screen s).	X	
			panel in	parent eptable	X	
		Visibility through inside cleaning a of windsc wipers heavily affected.	area			Χ
3.3. Rear-Vinview mirrors or devices	nspection.		Mirro or devic missi or not fitted accor to the requin (at least two rear- view devic availa	e ng ding rements ¹ es	X	
		Fewer tha two rear- view devi available.	ces		X	

				/e,	e ly ged	X		
			insecure.					
				Neces field of vision not cover	1	X		
3.4.	Wind	Visual Sfilspection and by operation.		with the	ting	X		
			(b)	Wipe blade defec	X r			
			Wiper bla missing o obviously defective.	r ,		X		
3.5.	Wind wash	Visual Sfilspection and by operation.	Washers 1 operating adequatel (lack of washing f but pump operating	y fluid	X			

			or water-jet			
			misaligned).			-
			Washers not operating.		X	
3.6.	Dem syste (X) ²	Visual Inspection mand by operation.	System inoperative or obviously defective.	X		
4. LAN	IPS, R	EFLECTORS	AND ELECTI	RICAL EQUIP	PMENT	<u> </u>
4.1. He	adlam	ps				
4.1.1 me	Cond and	yisual Wisual and by operation.	or miss light light source (mul light light source in the case of LED up to 1/3 not funct Sing light light light source in the case of LED up to 1/3 not funct Sing light light	tioning). tes; tioning). tes; usly ted ility.	X	
			(b) Sligh defee proje syste (refle and lens)	ctive ction m cctor	X	

			Heavily defective or missir projectio system (reflector lens).	ng		X		
				not securel attache				
4.1.2.	Alig	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 headlan not within limits laid down in the require	mp ements ¹ .	X		
			(b)	System indicat failure via the electro vehicle interfac	es nic	X		
4.1.3.	Swite	Visual https and by operation or using the electronic vehicle interface	(a)	Switch does not operate in accord with the require (Numb of headlan illumin at the same time)	e ance ements ¹ er mps	X		

				Maximum permitted light brightness to the front exceeded.	
			(b)	Function of control device impaired.	X
			(c)	System indicates failure via the electronic vehicle interface.	X
4.1.4.	Comj with requi	Visual Mancection and by and by roperation.	(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	X

				nitted lour.		
			so an lai no	mp	X	
4.1.5.	Level devic (when	Visual Inspection and by Operation, atopyssible,	no	evice ot perating.	Х	
	mand	or using the electronic vehicle interface.	de ca be op fro dr	anual vvice nnot perated om iver's at.	X	
			ind fai via the ele ve		X	
4.1.6.	Head clean devic (when mand	Visual MSPection and by operation if possible. atory)	Device not operating. In the case of gas- discharging lamps.	X	X	

4.2. Front and rear position lamps, side marker lamps, end outline marker lamps and daytime running lamps

4.2.1. Cond and opera	Visual timpection and by toperation.	(a)	Defee light sourc		Х		
			(b)	Defee lens.	ctive	X	
			(c)	Lamp not secur attacl	ely	X	

			Very ser risk of fa off.	ious alling		
4.2.2.	Switc	Visual Hispection and by operation.	(a)	Switch does not operate in accordance with the requirements ¹ . Rear position lamps and side marker lamps can be switched off when headlamps are on.	XX	
			(b)	Function of control device impaired.	X	
4.2.3.	Comp with requi	Visual Marcetion and by operation.	(a)	Lamp,X emitted colour, position, brightness or marking not in accordance with the requirements ¹ . Red light to the front	X	

	or white light to the rear; heavily reduced light brightness. (b) Products on lens or light source which reduce light, brightness or light source which reduce light	X	
	colour. Red light to the front or white light to the		
	rear; heavily reduced light brightness.		
4.3. Stop Lamps			
4.3.1. Conditing and operation operatoperation.	 (a) DefectXive light source(multiple light source in the case of LED up to 1/3 not functioning). Single light sources; in 	X	X

		All light sourc not	oning. es oning.		
		ight	tive ence ed	X	
		Lamp not secure attach ous	ely	X	
4.3.2. Switc	Visual httspection and by operation or using the electronic vehicle interface.	with the	te dance rements ¹ . red tion.	X	X

			ot cc de	unction f ontrol evice npaired.	X	
			in fa vi th el ve	ystem ndicates nilure ia ne lectronic ehicle nterface.	X	
			bi li fu fa to oj oi da no oj	perate, r	X	
4.3.3.	with	Visual Inspection and by operation.	Lamp, emitted colour, position, brightness of marking no in accordar with the requiremen White light to the rear; heavily reduced lig brightness.	ht	X	
4.4. Dir	ection	indicator and	-			
4.4.1.	Cond and	Visual tinspection and by toperation.	(a) D li so (r li	efectXve ght ource nultiple ght ource	X	

			Single light source in the case of LED less than 2/3			
		(b) Heavily defective (emitted affected)	light	tive ence ed	X	
		(c) Very seri risk of fa off.	Lamp not secur attach ous lling	ely	X	
4.4.2. Switc	Visual Hispection and by operation.	Switch denot operative accordant with the requirem No operative at all.	te in ce ents ¹ .	X	X	

4.4.3.	with	Visual Mispection and by operation.	Lamp, emitted colour, position, brightnes marking in accord with the requirem	ss or not lance	X	
4.4.4.	Flash frequ	Visual Inspection and by operation.	Rate of flashing in accord with the requirem (frequent more tha 25 % deviating	lance ents ¹ . cy n		
4.5. Fr	ont and	d rear fog lan	ips			
4.5.1.	anu	Visual inspection and by operation.	(a)	Defect&ve light source. (multiple light source in the case of LED up to 1/3 not functioning). Single light sources; in the case of LED light sources; in the case of LED light source s; in the case light source s; light source s functioning).	X	
			(b)	X Slightly defective lens	X	

			(no influe on emitt light) Heavily defective lens (emitted light affected).	ed		
			(c) Lamp not secur attach Very serious risk of falling off or dazzling oncoming traffic.	ely	X	
4.5.2.	Aligr (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). Cut-off line above that for dipped beam headlamps.	X	X	
4.5.3.	Switc	Visual hillspection and by operation.	Switch does not operate in accordance with the requirements ¹ . Not operative.	X	X	
4.5.4.	with	Visual Mancetion and by operation.	(a) Lamp emitti colou positi brigh or mark not in accor	ed r, on, tness	X	

		I	1	with	I	I
				the		
				requirements ¹		
				requirements		
				Swatam	X	
			(b)	System does		
				not		
				operate		
				in		
				accordance		
				with		
				the		
				requirements ¹		
46 Re	oversin	g lamps		1		
				V		
4.6.1.	Cond	Visual ition inspection	(a)	Defective		
	and	and by		light		
	opera	and by tion operation.		source.		
	-	operation.		v		
			(b)	X Defective		
				lens.		
				_ X	X	
			(c)	Lamp	Λ	
				not		
				securely		
				attached.		
			Very se	rious		
			risk of	talling		
			off.			
1 ()	C	Visual liance inspection		т	Х	
4.6.2.	Com	inspection	(a)	Lamp,		
	with	und by		emitted		
	requi	reperation.		colour, position,		
				brightness		
				or		
				marking		
				not		
				in		
				accordance		
				with		
				the		
				requirements ¹		
					X	
			(b)	System	Λ	
				does		
				not		
				operate		
				in		
				accordance		
				with		

			the			
			requi	rements ¹ .		
4.6.3.		Visual httpection and by operation.	Switch does not operate in accordance with the requirements ¹ . Reversing lamp can be switched on with gear not in reverse position.	X	X	
4.7. Re		istration plate l	amp	1		
4.7.1.	and	Visual and by toperation.	 (a) Lamp throw direct or white light to the rear. (b) Defeat light source 	ring T X ctive	X	
			(Multi light source Defective light source. (Single light source).	e).		
			(c) Lamp not secur attach Very serious risk of falling off.	ely	X	
4.7.2.	with	Visual Mancetion and by rependion.	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.	Visual Condition MSpection.	(a) Reflect equipm defecti or damag Reflec affecte	nent ive ged. ting	X
		(b) Reflec not secure attache Likely to fall off.	ly	X
4.8.2.	Visual Compliance with requirements ¹	Device, reflected colour or position not in accordance with the requirements ¹ Missing or reflecting red colour to the front or white colour to the rear.	X	X
4.9. Te	ll-tales mandatory fo	r lighting equipn	nent	
4.9.1.	Visual Condition and and by operation		X	X
4.9.2.	Visual Compliance inspection with and by requir operation .	Not in accordance with the requirements ¹ .	X	
4.10.	Visual Electrical connectip@Ssible between towingelectrical vehicle ontinuity and of the trailer	(a) Fixed 2 compo not secure attache Loose socket	onents ly ed.	X
	trailer or semi- trailer	(b) Damag or	X ged	X

		insula Likely to cause a short- circuit fault. (c) Traile or towir vehic electri conne not funct corre Trailer brake lights not working at all.	ig ile ections ioning ctly.	X	X
4.11. Elect wirin	Visual Visual With vehicle over a pit or on a hoist, including inside the engine compartment (if applicable).	secur Fixin loose touch sharp edges conno likely to be disco Wirir likely to touch hot parts rotati parts or the groun conno	ure uately ed. gs s, ectors nnected. ng ng nd, ectors nnected vant	X	X

	braking steerin			
	(b) Wiring slightly deterio Wiring heavily deteriorated. Wiring extremely deteriorated (relevant parts for braking, steering).	y	2	X
	(c) Damag or deterio insulat Likely to cause a short- circuit fault. Imminent risk of fire, formation of sparks.	orated	2	X
4.12. Non obligatory by lamps operation. and retro-reflectors (X) ²	lamp/ retro- reflecto fitted not in accord with the	ance ements ¹ . ng/		

	the	
	rear.	
	(b) Lamp ^X	X
	operation not	
	in accordance	
	with the	
	requirements ¹ .	
	Number of headlights simultaneously operating exceeding permitted light brightness; Emitting red light to the front or white light to the	
	rear.	
	(c) Lamp/ retro- reflector not securely attached. Very serious risk of falling off.	X
4.13. Batter Visual Visual Yispection.	(a) InsecuXe. Not properly attached; likely to cause a short- circuit fault.	X
	(b) Leaking. Loss of hazardous substances.	X

	(c) Defect switc (if require	h	X	
((d) Defec fuses (if requir		Х	
	(e) Inapp ventil (if requir		X	

5. AXLES, WHEELS, TYRES AND SUSPENSION

5.1. Axles

5.1. Axles				
5.1.1. A	xles Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a	Stability impaired,	X	X
	maximum mass exceeding 3,5 tonnes	functionality affected: Extensive movement relative to its fixtures.	X	X
		(c) Unsafe modification ³ . Stability impaired, functionality affected, insufficient clearance to other vehicle parts or to the ground.		X
	ub les visual with vehicle over a pit or	(a) Stub axle fractured.		X

	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.	(b) Exces wear in the swive pin and/ or bushe Likelihood of loosening; directional stability impaired.	el	X	X
		(c) Excess moves betwo stub axle and axle beam Likelihood of loosening; directional stability impaired.	ment een	Χ	X
		(d) Stub axle pin loose in axle. Likelihood of loosening; directional stability impaired.		X	X
5.1.3. Whee bearing	Visual inspection with the vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles	stabil impai dange of	l ng. itional ity ired;	X	X

		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.	(b) Whee bearin too tight, jamm Danger of overheating; danger of demolishment.	ng	X	X
5.2. Whe	els a	nd tyres	I			
· ·	Road whee hub	Visual inspection.	(a) Any whee nuts or studs missi or loose Missi fixing or loose to an exten which very seriou affect road safety	ng ng g t isly s	X	X
			(b) Hub worn or dama Hub worn or damaged in such a way that secure fixing of wheels is affected.	ged.	X	X

5.2.2. When	Visual heelfnspection of both sides of each wheel with vehicle over a pit or	fra or we	ny acture elding efect.		X
	on a hoist.	re rir nc pr	yre taining ngs ot operly tted.	X	X
		ba di or	orn. b	X	X
		siz tea de co or tyj no in ac wit the rea an af	pe ot ecordance ith e quirements ¹	X	
5.2.3. Ty	res Visual inspection of the entire tyre by either rotating the road wheel with it off the	siz loc ca ap	vre ze, ad upacity, oproval ark	X	X

ground and the vehicle over a pit or on a hoist, or by rolling the vehicle backwards and forwards over a pit.	not in acc wit the req and aff roa saf Ins loa cap or spe cat for act use tyr tou oth fix, vef par imj saf	egory fordance h uirements ¹ l ecting d ety. ufficient d pacity ed egory ual c, e ches er ed hicle ts pairing		
	of	ne e n eels ferent	X	
	(c) Type on sam axl of diff cor	res	X	

	cross- ply).		
(d) Cord visi or damag		X	X
(e) Tyre trea depth no accordan with the requirem	t in ce	X	X
(f) Tyre rubl against o compone (safe driv not impa	ther ents ving	X	
(g) Cord protectio layer affe	Re- grooved tyres not in accordance with requirements ¹ .	X	X

53 Su	spension system	(h) Tyre X pressure monitoring system malfunctioning or tyre obviously underinflated. Obviously inoperative.	X	
5.5. 50	Visual		X	X
5.3.1.	Spring and with vehicl stabiliser a pit o on a hoist. Wheel play detectors may be used and ar recommend for vehicles having a maximum mass exceeding 3	r of springs to chassis or axle. Relative movement visible. fixings very seriously		
	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) Uns mod Insufficient clearance to other vehicle parts; spring system inoperative.	dification ³	X	X
5.3.2.	Shock _{in} absorber ov or us ec	fisual hspection fish vehicle ver a pit or n a hoist or sing special quipment, if vailable.	atta of sho abso to cha or axle Sho	orbers ssis e. ck orber	X	
			sho abso sho sigr of seve leak or	orber wing is	X	
5.3.2.1.	testingar	se special Gaipment nd compare ft/right ffferences	diff		X	
			valı not	imum	X	
5.3.3.	Torque _m tubes, _W radius _{ov} arms, or	fisual hspection vith vehicle ver a pit or n a hoist. Wheel play	atta of	ecure chment nponent ssis	X	X

	detectors nsion be used and are recommended for vehicles having a maximum mass	of loose	tional ity		
	exceeding 3,5 tonnes	corro	sively	X	X
		(c) Unsa modi Insufficient clearance to other vehicle parts; system inoperative.	fe fication ³ .	X	X
5.3.4. Susp joints	Visual mspection 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	joints Likel of loose	es nsion ihood ning; tional ity	X	X
		(b) Dust cover sever deter		X	

			Dust cov missing of fractured	or		
5.3.5.	Air suspe	Visual inspection nsion	(a)	System inoperable.		Х
			(b) Function of system seriously affected.	n l	X	X
			(c)	Audible system leakage.	X	
6. CH	ASSIS	AND CHASSIS	S ATTAC	HMENTS	I	
6.1. Cł	nassis o	r frame and at	tachment	S		
6.1.1.	Gene	Visual mspection twith vehicle over a pit or on a hoist.	(a)	Slight fracture or deformation of any side or cross- member. Serious fracture or deformation of any side	X	X

			of stren plate or	ber. curity gthening	X	X
			corro whic affec the rigid of the	ets	X	X
6.1.2.	and	Visual untspection with vehicle over a pit or ofi a hoist.	(a) Insec or leaki exha syste	ng ust	X	
					X	X
6.1.3.	Fuel tank and pipes (inclu	with vehicle over a pit or	(a) Insectant tank or pipes creat	5,		X

heatingse of leak fuel detecting tank devices in the and case of LPG/	pa ris of fire			
pipes)CNG/LNG systems.	fue or mi or ine	effective ler p.	X	X
		x pafed pes.	X	
	(if rec no op	ppcock quired)	X	
	fue fue tar or exi no pro shi — en co	k ie aking el; el nk haust		X
	CN CN	PG/ NG/ NG		X

	hydrogen system not in accordance with requirements; any part of the system defective ¹	
6.1.4. Uisual 6.1.4. Bumperspection. lateral protection and rear underrun devices	(a) Looseness or damage likely to cause injury when grazed or contacted. Parts likely to fall off; functionality heavily affected.	X X
	(b) Device obviously not in compliance with the requirements ¹	X
6.1.5. Spare Visual inspection. wheel carrier (if fitted)	(a) Carrier X not in proper condition	
	(b) Carrier fractured	X

		or insecure.		
		(c) A spare wheel not securely fixed in carrier Very serious risk of falling off.	X	X
6.1.6.	Mechanical coupling and towin device with special attention to any safety device fitted and/or use of measuring gauge.	(a) Component damaged, defective or cracked (if not in use). Component damaged, defective or cracked (if in use)	X	X
		(b) Excessive wear in a component. Below wear limit.	X	X
		(c) Attachment defective. Any attachment loose with a very serious risk of falling off.	X	X
		(d) Any safety device missing or not	X	

	operating correctly.		
	(e) Any coupling indicator not working.	X	
	(f) Obstruct registration plate or any lamp (when not in use) Registration plate not readable (when not in use).	X	
	(g) Unsafe modification ³ (secondary parts). Unsafe modification ³ (primary parts).	X	X
	(h) Coupling too weak	X	
6.1.7. Transmission.	(a) Loose or missing securing bolts Loose or missing securing bolts to such an extent that road safety is seriously endangered.	X	X

(b) Very seri risk of loosenin cracking	g or	X	X
(c) Very seri risk of loosenin, cracking	g or	X	X
(d) Very seri risk of loosenin cracking	g or	X	Х
(e)	A damaged or bent shaft.	X	
(f) Very seri risk of loosening cracking	g or	X	X
(g)	Dust X cover	X	

			Dust cov missing of fractured (h)	er or Illega powe train	orated.	X	
6.1.8.	Engine	Visual inspection not theeessarily on a pit or hoist.	Deteriora obviously and seven damaged mounting Loose or fractured mounting	ated, y rely gs.		X	X
6.1.9.	Engine perform $(X)^2$	Visual Inspection and/or using electronic interface	(a)	Contr unit modif affect safety and/ or the envire	fied ing	X	
			(b)	affect safety and/ or the	fication ing		X
6.2. Ca	b and b	odywork				1	· · · · · · · · · · · · · · · · · · ·
6.2.1.	Condiț	Visual	(a)	A loose or dama panel or part likely to cause injury		X	X

		Likely to fall off.			
		(b) Inse bod pill Stability impaired.		X	X
		enti of eng or	ine aust	X	X
		· · ·	safe dification ³ .	X	X
6.2.2. Mou	Visual over a pit or on a hoist.	Stal		X	X
		not loca squ on	viously	X	
		or	y/	X	X

	to		
	chassis		
	or		
	cross-		
	members		
	and		
	if		
	symmetrical		
	Insecure		
	or missing		
	fixing of		
	hadu/aab		
	body/cab		
	to chassis		
	or cross-		
	members		
	to such an		
	extent that		
	road safety is		
	very seriously		
	very seriously		
	endangered.		
		X	X
	(d) Excessive	Λ	Λ
	corrosion		
	at		
	fixing		
	points		
	on		
	integral		
	bodies.		
	Stability		
	impaired.		
Visual		X	
6.2.3. Doors inspection.	(a) A	11	
and	door		
door	will		
catches	not		
catches			
	open		
	or		
	close		
	properly.		
		V	v
	(b) A	X	X
	door		
	likely		
	to		
	open		
	inadvertently		
	or		
	one		
	that		
	will		
	not		

				ntly at	d ng		
				ges, r	X s, es orated.	Х	
6.2.4.	Floor	Visual inspection over a pit or on a hoist.	Floor insecure or badly deteriorat Insufficie stability.			X	X
6.2.5.	Drive seat	Visual rinspection.		Seat with defec struct Loose seat.	ure.	X	X
				mech not functi correc ing st	stment anism oning ctly.	X	X
6.2.6.	Other seats	Visual inspection.		Seats in defec condi or insec	tive tion	X	

				(seco parts) Seats in defec condi or insec (mair parts)	tive tion ure		
				with requir l ; ng ice		X	
6.2.7.	Drivi contr	Visual nespection oland by operation.	Any cont necessary for the sa operation of the vehicle n functioni correctly. Safe operation affected.	v lfe n ot ng		X	X
6.2.8.	Cab steps	Visual inspection.	(a)	Step or step rung insec Insuf stabil	ure. ficient	X	
			(b)	Step or rung in a condi	tion	X	

		likely to cause injury to users.	
6.2.9.	Visual Other inspection. interior and exterior fittings and equipment	(a) Attachment of other fitting or equipment defective.	X
		(b) Other fitting or equipment not in accordance with the requirements ¹ . Parts fitted likely to cause injuries; safe operation affected.	X
		(c) Leaking hydraulic equipment. Extensive loss of hazardous material.	X
6.2.10.	Visual Mudgunspection. (wings), spray suppression devices	(a) Missing, loose or badly corroded. Likely to cause injuries; likely to	X

				fall off.		
			(b) Insufficie clearance tyre/whee (mudgua	e to el	X	
			(c) Insufficie coverage tread.		X	
6.2.11.	Stand	Visual inspection.	(a)	Missing, loose or badly corroded.	X	
			(b)	Not in accordance with the requirements ¹	X	
			(c)	Risk of unfolding when the vehicle is in motion.		X
6.2.12.	Hand and footre	Visual Hispection. ests	(a)	Missing, loose or	X	

			badly corroded.		
		(b)	Not in accordance with the	X	
			requirements ¹		
7. OTI	HER EQUIPMENT		1		
	fety-belts/buckles ar	d restrair	nt systems		
7.1.1.	Visual Securityspection. of safety- belts/ buckles mounting	(a)	Anchorage point badly deteriorated. Stability affected.	X	X
	mounting	(b)	Anchorage loose.	X	
7.1.2.	Visual Condition of and by safety operation. belts/ buckles.	(a)	Mandatory safety- belt missing or not fitted.	X	
		(b) Any cut or sign o overstre	of	X	
		(c)	Safety- belt not in accordance with the requirements ¹ .	X	
		(d)	Safety- belt buckle damaged or	X	

				not functioning correctly.		
			(e)	Safety- belt retractor damaged or not functioning correctly.	X	
7.1.3.	Safety _{in} belt a load	Visual nspection, and/or using electronic nterface	(a)	Load limiter obviously missing or not suitable with the vehicle.	X	
			(b)	System indicates failure via the electronic vehicle interface.		X
7.1.4.	Pre-	Visual nspection, and/or using electronic filerface	(a)	Pre- tensioner obviously missing or not suitable with the vehicle.	X	
			(b)	System indicates failure via the electronic vehicle interface.		X

7.1.5.	Airba	Visual Anspection, 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
			(c)	Airbag obviously non- operative.	X	
7.1.6. SRS Syste	SRS Syste	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
7.2.	Fire	Visual inspection.	(a)	Missing.	X	
	extin (X) ²	inspection. guisher	(b)	Not in accordance with	X	

		the requirements ¹ If required (e.g. taxi, buses, coaches, etc.).		
7.3.	Locks and anti- theft device	(a) Device not functioning to prevent vehicle being driven.		
		(b) Defective Inadvertently locking or blocking.	X	X
7.4.	Visual Warning triangle (if required)	(a) Missing or incomplete.		
	$(X)^2$	(b) Not in accordance with the requirements ¹ .		
7.5.	First aid kit. (if required) (X) ²	Missing, incomplete or not in accordance with the requirements 1 .X		
7.6.	Visual Wheelinspection. chocks (wedges) (if required) (X) ²	Missing or not in good condition, insufficient stability or dimension.	X	
7.7.	Visual Audiblfispection warning deviceoperation	(a) Not X working properly. Not working	X	

				at all.			
			(b)	Contr insec			
			(c) Emitted sound likely to confused official s	with the requi be with	X dance rements ¹ .	X	
7.8.	Speed	Visual Inspection or by operation during road test or by electronical means.	(a)	with the	dance rements ¹ . ing	X	
			(b) Not operation all.	Oper impa nal at	X ation ired.	X	
			(c) Not capa of being illuminat all.	illum ble		X	
7.9.	Tacho (if fitted requi		(a)	Not fitted in accor with	dance	X	

		the requirements ¹ .	
	(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
7.10. Speed inspecting limitation b device opera (if fitted availa required)	ction (a) y tion if	Not fitted in accordance with the requirements ¹ .	X
	(b)	Obviously not operational.	X
	(c)	Incorrect set speed	X

				(if checke	ed).		
			(d)	Defect or missin seals.		X	
			(e)	Plaque missin or illegibl	g	X	
			(f)	Size of tyres not compa with calibra parame	tion	X	
7.11.	Odon if availa (X) ²	Visual niffspection, and/or using bectronic interface	(a)	Obviou manipu (fraud) to reduce or misrep the vehicle distance record.	ulated resent e's se	X	
			(b)	Obviou inopera		Х	
7.12.	if fitted		(a)	Wheel speed sensors missin or damag	S g	X	
	requi	red	(b)	Wiring damag		X	
			(c)	Other compo missin		X	

				or damaged.		
			(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. NUI		E				
8.1. No	ise	G 1 ::			V	
8.1.1.	suppi	Subjective evaluation (Unless the inspector considers that the noise level may be borderline, in which case a measurement of noise emitted by	(a)	Noise levels in excess of those permitted in the requirements ¹ .	X	
		stationary vehicle using a sound level meter may be conducted)	(b)	Any part of the noise suppression system loose,	X	X

	dama incor fitted missi or obvio modii in a way that would adver affect the noise levels Very serious risk of falling off.	rectly ng usly fied d sely		
--	--	---	--	--

8.2. Exhaust emissions

8.2.1. Positive ignition engine emissions

8.2.1.1.	Exha emiss contra equip	ol	1	(a)	Emiss contro equip fitted by the manu absen modi or obvio defec	ol ment facturer t, fied usly	X	
				(b)	Leaks which would affect emiss meas	n 1	X	
8.2.1.2.	Gased emiss	ions	For vehic up to emiss classo Euro 5 and	sion	Eithe gaseo emiss excee the speci levels given by	us ions d fic	X	

Euro	the		
V ^g :	manufacturer;		
measurement	,		
using (b)	Or,	X	
an (b)	if		
exhaust	this		
gas	information		
analyser			
in	is		
	not		
accordance with	available,		
	the		
the	CO.		
requirements ¹	emissions		
or	exceed,		
reading)	for		
of	vehicles		
OBD.	not		
Tailpipe	controlled		
testing	by		
shall	an		
be	advanced		
the	emission		
default	control		
method	system,		
of	<u> </u>		
exhaust	or		
emission	- 3,5 %		
assessment.	according		
On	to		
the	the		
	date		
basis of	of		
	first		
an	registration		
assessment	-		
of	or		
equivalence,	use		
and	specified		
by	in		
taking	requirements ¹ .		
into (ii)	for		
account	vehicles		
the	controlled		
relevant	by		
type-	an		
approval	advanced		
legislation,	emission		
Member	control		
States	system,		
may	— at		
authorise	engine		
the	idle:		
use	0,5 %		
usu	0,3 70		

of	_	at		
OBD		high		
in		idle:		
accordance		0,3 %		
		0,5 /0		
with	or			
the	-	at		
manufacturer's		engine		
recommendatio	ons	idle:		
and		0,3 % ^g		
other	_	at		
requirements.		high		
 For		idle:		
vehicles				
		0,2 %		
as	according	5		
of	to			
emission	the			
classes	date			
Euro	of			
6	first			
and	registrati	on		
Euro	-	011		
	or			
VI ^h :	use			
measurement	specified			
using	in			
an	requirem	ents ¹		
exhaust	requirem	ents .		
	T 1 1		Х	
gas analyser	Lambda			
in	coefficien	nt		
	outside			
accordance	the			
with	range			
the	1 ± 0.03			
requirements ¹	or			
or	not			
reading				
of	in			
	accordan	ce		
OBD ·	with			
in	the			
accordance	manufact	urer's		
with	specifica	tion;		
the	1	,		
manufacturer's	ODD		Х	
manufacturer's	OBD		X	
manufacturer's recommendation	read-		X	
manufacturer's recommendation and	nsad- out		X	
manufacturer's recommendation and other	nsad- out indicating		X	
manufacturer's recommendation and other requirements ¹ .	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other requirements ¹ .	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other requirements ¹ . Measurements not	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other requirements ¹ . Measurements not applicable	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other requirements ¹ . Measurements not applicable for	ns Tead- out indicating significat	nt	X	
manufacturer's recommendation and other requirements ¹ . Measurements not applicable	ns Tead- out indicating significat	nt	X	

_

	stroke				
8.2.2. Compre	ession ignition	engine en	nissions		
8.2.2.1. Exhat emiss contro equip	ol	(a)	Emission control equipment fitted by the manufacturer absent or obviously defective.	X	
		(b)	Leaks which would affect emission measurements.	X	
8.2.2.2. Opact Vehicles registered or put into service before 1 January 1980 are exempted from this requirement	up to emiss classe Euro 5 and Euro V ⁱ : Exhai gas opaci to be meas durin free	ion es ust ty ured g eration	For vehicles registered or put into service for the first time after the date specified in requirements ¹ . opacity exceeds the level recorded on the manufacturer's plate on the vehicle;	X	

gear lever in neutral and clutch engaged or reading of OBD. The tailpipe testing shall be the default method of exhaust emission assessment. On the basis of an assessment of equivalence, Member States may authorise the use of OBD in accordance with the manufacturer's recommendations and other requirements. For vehicles as of emission

> classes Euro 6 and Euro VI^j: Exhaust gas opacity to be measured during free acceleration (no load from idle up to cutoff speed) with gear lever in neutral and clutch engaged or reading of OBD in accordance with the manufacturer's recommendations and other requirements¹. Vehicle preconditioning: Vehicles 1. may be tested without

	precond	itioning,
	although	
	for	
	safety	
	reasons	
	checks	
	should	
	be	
	made	
	that	
	the	
	engine	
	is	
	warm	
	and	
	in a	
	satisfact	torv
	mechan	
	conditio	
2.	Precond	
<i>2</i> .	requirer	
	(i)	Engine shall
		be
		fully
		warm,
		for
		instance
		the
		engine
		oil
		temperature
		measured
		by
		a
		probe
		in
		the
		oil
		level
		dipstick
		tube
		to
		be
		at
		least
		80 °C,
		or
		normal
		operating
		temperature
		if
		lower,

> or the engine block temperature measured by the level of infrared radiation to be at least an equivalent temperature. If, owing to the vehicle configuration, this measurement is impractical, the establishment of the engine's normal operating temperature may be made by other means, for example by the operation of the engine cooling fan.

(ii)	Exhan syster shall be purge by at least three free accele cycles or by an equiv metho	n d eration s alent			
	(b) 	is not availa or requir do not allow the use of refere values for natura aspira engin 2,5 m 1, for turbo- charg engin 3,0 m 1, or for vehic identiin	nation ble rements ¹ mce s, hlly ted es: - ed es: -	X	

	or first regist or put into servic for the first time after the date specif in 1,5 m 1k or 0,7 m	fied rements ¹ :	
Test procedure: 1. Engine and any turbocharger fitted, to be at idle before the start of each free acceleration cycle. For heavy- duty diesels, this means waiting for at least			

	10
	seconds
	after
	the
	release
	of
	the
	throttle.
2.	То
	initiate
	each
	free
	acceleration
	cycle,
	the
	throttle
	pedal
	must
	be
	fully
	depressed
	quickly
	and
	continuously
	(in
	less
	than
	one
	second)
	but
	not
	violently,
	so
	as to
	obtain
	maximum
	delivery
	from
	the
	injection
	pump.
3.	During
	each
	free
	acceleration
	cycle,
	the
	engine
	shall
	reach
	cut-
	off
	speed

> or, for vehicles with automatic transmissions, the speed specified by the manufacturer or, if this data is not available, then two thirds of the cutoff speed, before the throttle is released. This could be checked, for instance, by monitoring engine speed or by allowing а sufficient time to elapse between initial throttle

depre	ssion
and	
releas	e.
which	
in	-
the	
case	
of	1
vehic	ies
of	
categ	ories
M ₂ ,	
M ₃ ,	
N_2	
and	
N ₃ ,	
shoul	d
be	~
at	
least	
two	da
secon	us.
Vehic	les
shall	
only	
be	
failed	-
if	
the	
arithr	netic
mean	S
of at	
least	
the	
last	
three	
free	
	eration
cycle	
-	0
are	
in	
exces	S
of	
the	
limit	
value	-
This	
may	
be	
calcu	lated
by	
ignor	ing
6	

4.

> any measurement that departs significantly from the measured mean, or the result of any other statistical calculation that takes account of the scattering of the measurements. Member States may limit the number of test cycles. То avoid unnecessary testing, Member States may fail vehicles which have measured values significantly in excess of the

5.

	limit	1	
	values		
	after		
	fewer		
	than		
	three		
	free		
	acceleration		
	cycles		
	or		
	after		
	the		
	purging		
	cycles.		
	Equally		
	to		
	avoid		
	unnecessary testing,		
	Member		
	States		
	may		
	pass		
	vehicles		
	which		
	have		
	measured		
	values		
	significantly		
	below		
	the		
	limits		
	after		
	fewer		
	than		
	three		
	free		
	acceleration		
	cycles		
	or		
	after		
	the		
	purging		
	cycles		
8.3. Electrom	agnetic interference suppressi	on	
Radio	Any	X	
interference	requirements	1	
	of the		
$(\mathbf{X})^2$			
	requirements ¹		
	not met.		
8.4. Other ite	ms related to the environment	·	
	· · · · · · · · · · · · · · · · · · ·		

			Ĩ	T
8.4.1. H	Fluid	Any	X	X
		excessive		
1	eaks	fluid leak,		
		other than		
		water, likely		
		to harm the		
		environment		
		or to pose a		
		safety risk		
		to other road		
		users.		
		Steady		
		formation of		
		drops that		
		constitutes a		
		very serious		
		risk.		
0 SUDDI	EMENTADV TEG	TS EOD DASSENCED CAD	DVINC VEIIIO	

9. SUPPLEMENTARY TESTS FOR PASSENGER-CARRYING VEHICLES CATEGORIES M₂, M₃

9.1. Doors

9.1.1.	anu	Visual nespection and by	(a)	Defective operation.	X	
	exit doors	bors (b) Like to ca	(b) Likely to cause injuries.	X Deteriorated condition.	X	
			(c)	Defective emergency control.	X	
			(d)	Remote control of doors or warning devices defective.	X	
			(e) Insufficie door wid		X	

9.1.2.	Emer exits	Visual Sinspection and by	(a)	Defeo opera		X	
		operation (where appropriate)	(b) Emergen exits sign missing.	exits signs illegi icy		X	
			(c)	Missi hamn to break glass	ner		
			(d) Insufficie width or access blocked.	with requi ent	X dance rements ¹ .	X	
9.2.	Demi and defro syste (X) ²	Visual stinspection and by soperation m	(a)	Not opera corre Affec safe opera of the vehic	ctly. ting tion	X	
			(b) Danger t health of	0	ıst r's	X	X

		persons on board.	X	
		(c) Defective defrosting (if compulsory).		
9.3.	Visual Ventil $\frac{1}{4}$ Hispection & and by heating peration system $(X)^2$	(a) DefectXve operation. Risk to health of persons on board.	X	
		 (b) Emission of toxic or exhaust gases into driver's or passenger compartment. Danger to health of persons on board. 	X	X
9.4. Se	eats			
9.4.1.	Visual Passen seats (including seats for accompanying personnel)	Folding seats X (if allowed) not working automatically. Blocking an emergency exit.	X	
9.4.2.	Visual Driver inspection (additional requirements)	(a) DefectXve special devices such as anti- glare shield. Field of	X	

		vision impaired.		
		(b) Protection for driver insecure or not in accordance with requirements ¹ . Likely to cause injuries.	X	
9.5.	Visual Interior lighting and destination devices (X) ²	Device X defective or not in accordance with requirements ¹ . Not operational at all.	X	
9.6.	Visual Gangwaysection standing areas	(a) Insecure floor. Stability affected.	X	X
		(b) Defective rails or grab handles. Insecure or un-useable.	X	
		(c) Not in accordance with the requirements ¹ . Insufficient width or space.	X	

9.7.	Stairs and steps	Visual inspection and by operation (where appropriate)	cor Dat cor Sta	eriðrated dition. naged dition. bility ected.	X	X
			stej not ope		X	
			wit	ordance	X	
9.8.	Passe comm system $(X)^2$	Visual ngSpection nunication ^m operation.	Defective system. Not operational a all.	t X	X	
9.9.	Notic $(X)^2$	Visual Supervision.	erro or ille	X ssing, oneous gible ice.		
			wit	ordance	X	
9.10. R	equire	ments regardi	ng the transp	ortation of ch	ildren. (X) ²	
9.10.1.	Door	Visual ^s inspection	Protection of doors not in accordance with the requirements regarding		X	

			this form transport				
9.10.2.	Signa and specia equip		Signallin or specia equipmen absent or in accord with requirem	l nt not ance	X		
	equire	ments regardin	g the trai	nspor	tation of perso	ns with reduce	d mobility
(X) ² 9.11.1.	Doors ramps and lifts	Visual ^{\$} inspection ^{\$} and operation	(a)	Defec opera Safe opera	tion. tion	X	
	ints		(b) Stability affected; likely to cause injuries.	Deter	X iorated	X	
			(c) Safe operation affected.	Defec contro		X	
			(d) Not operat all.	Defeo warni devic ating	ing	X	
			(e)	with the	dance rements ¹ .	X	
9.11.2.	restra	Visual Inspection and by Operation if appropriate	(a)	Defect opera Safe opera affect	tion. tion	X	

			(b) Stability affected; likely to cause injuries.	condi	X iorated tion.	X	
			(c) Safe operatior affected.	Defec contro		X	
			(d)	with the	dance rements ¹ .	X	
9.11.3.	speci	Visual linspection al ment	Signallin or specia equipmen absent or in accord with requirem	l nt not lance		X	
9.12. 0	ther s	pecial equipme	$nt(X)^2$				
9.12.1.	Insta for food	Visual lations ration	(a)	not in accor with the	lation dance rements ¹ .	X	
			(b)	Instal dama to such an exten that it would be dange to	t	X	

				use it.			
9.12	2.2.	Sanit instal	Visual ary ary ary ation	Installation not in accordance with the requirements ¹ . Likely to cause injuries.	X	X	
9.12	2.3.	(e.g.	visual	Not in accordance with the requirements ¹ . Safe operation of vehicle affected.	X	X	
a	The v	ehicle ca	tegories which are out	tside the scope of this	Directive are include	d for guidance.	
b	43 %	for semi-	trailers approved befo	ore 1 January 2012.			
c	48 %	for vehic	les not fitted with AB	S or type-approved be	efore 1 October 1991.		
d	45 %	for vehic	les registered after 19	88 or from the date sp	ecified in requiremer	nts, whichever is the l	ater.
e	43 % the la		trailers and draw-bar	trailers registered afte	r 1988 or from the da	te specified in require	ements, whichever is
f	E.g. 2	,5 m/s ² fo	or N_1 , N_2 and N_3 vehi	cles registered for the	first time after 1.1.20	012.	
g			l in accordance with D 7/EEC and Directive 2		Regulation (EC) No	715/2007, Annex I, T	Fable 1 (Euro 5),
h		approved 009 (Eur	l in accordance with R o VI).	Regulation (EC) No 71	5/2007, Annex I, Tab	ble 2 (Euro 6) and Reg	gulation (EC) No
i			l in accordance with E 7/EEC and Directive 2		Annex I, Table 1 (Eu	ro 5) to Regulation (EC) No 715/2007,
j		approved 009 (Eur	l in accordance with A o VI).	Annex I, Table 2 (Euro	6) to Regulation (EC	C) No 715/2007, and I	Regulation (EC) No
k	Direc	tive 98/69	l in accordance with li 9/EC or later; row B1, er 1 July 2008.				
1			l in accordance with the hegulation (EC) No			Annex I(Euro 6). Typ	e-approved in
NOT	ES:						
by re	etrofitti	ng obliga	e laid down by type-ap ations or by national le uirements has been ch	egislation in the count			
2		~ ·					

 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.