$TA001_{M23} \\$

INFORMATION DOCUMENT FOR LIGHT BUSES AND BUSES

Initial type approval	☐ Extension of a type of vehicle	☐ Extension for modification	
	Previous TA no	Previous TA no	

Any drawings must be supplied in appropriate scale and in sufficient detail on size A4, or on a folder of A4 format. Photographs, if any, must show sufficient detail. Submissions in soft copy format are acceptable. If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.

Note: The information item printed in *Italic* shall also be completed if available.

0. 0.1.	GENERAL Make (trade name of manufacturer):
0.2.	Type (multiple entries under one type is allowed)):
0.2.	Variant/ Version/Model Code ⁽¹⁾ (only list out model under this
	application):
0.2.1.	Commercial Name or Model Name or Sale Designation:
0.3.	Means of identification of type, if marked on the vehicle (b):
0.3.1.	Location of that marking:
0.4.	Category of vehicle:
0.5.	Name and address of manufacturer:
0.5a.	Name and address of manufacturer's local authorized
	representative and his C&E ID, if any:
0.6.	Location of the statutory plates (if any):and
0.6.a.	Location of the vehicle identification number (enter details in
	Section 9.17.):
0.6.b.	The serial numbering of the type begins with no.:
0.8.	Address(es) of assembly plant(s):
1. 1.1. 1.3. 1.4.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE Photographs and drawings of a representative vehicle (showing the plan, front and rear elevations, nearside and offside elevations seat arrangement and space for standing passenger): Number of axles:and wheels: Chassis (overall drawing):
2.	MASSES AND DIMENSIONS (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheelbase(s) (fully loaded):
2.3.1.	Track of each steered axle:
2.3.2.	Track of all other axles:
2.4.	Range of vehicle dimensions (overall)
2.4.2.	For chassis with bodywork
2.4.2.1.	Length:
2.4.2.2.	Width:
2.4.2.3.	Height:
2.6.	Mass of the vehicle (o) (maximum and minimum for each variant):
2.6.1.	Distribution of this mass among the axles (maximum and minimum for each variant): 1
2.8.	Technically permissible maximum laden mass ^(Z2) stated by the manufacturer ^(*) :
2.8.1.	Distribution of this mass among the axles (*): 1 2etc
2.9	Technically permissible maximum mass on each axle: 1)

3.	POWER PLANT		
3.1.	Manufacturer (Make):		
3.1.1.	Manufacturer's engine code as marked on engine (Type):		
3.1.1.c	Emission approval reference: (Please enclosed EPD's		
	Approval letter)		
3.2.	Internal combustion engine		
3.2.1.1.	Working principle:		
3.2.1.2.	Number and arrangement of cylinders:		
3.2.1.3.	Engine capacity:		<i>c.c.</i> .
3.2.1.8.	Maximum power output at speed:	kW@	rpm
3.2.9	Exhaust system		
3.2.9.2	Description and/or drawing of the exhaust system:		
3.2.12.2.1	Catalytic converter	Yes/N	0
	Identification Marks		
3.2.12.2.6	Particulate trap	Yes/N	0
	Identification Marks		
3.2.12.2.7	On-board-diagnostic (OBD) system	Yes/N	0
3.2.15.	LPG fuelling system:	Yes/N	0
3.2.15.1.	Type-approval number: (Please enclosed EMSD's		
	Approval letter)		
	-		
3.3	Electric Motor		
3.3.1	Type (winding, excitation):		
3.3.1.1	Maximum hourly output:		kW
	Maximum 30-minutes power according to ECE R85:		kW
3.3.1.2	Operating voltage:		V
3.3.2	Battery		
3.3.2.1	Number of cells:	cells	modules
3.3.2.2	Mass:		kg
3.3.2.3	Capacity:	Ah @	V
3.3.2.4	Position		
3.4	Other engines or motors or combinations thereof		
	(particulars regarding the parts of such engines or		
	motors)		
3.4.1	Hybrid electric vehicle	Yes / N	lo
3.4.2	Category of Hybrid electric vehicle		

(TRANSMISSION Gearbox(Make and Type (manual/autor) Gear ratios	d Type) :						
(Gearbox(Make and Type (manual/autor	d Type) :						
	Type (manual/auto							
1.	• •	matic/CVT (continuously va						
	Gear ratios		Type (manual/automatic/CVT (continuously variable transmission)) (1)					
(
	Gear	Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)	Final drive ratio(s) (ratio of gear box output shaft to driven wheel revolutions)	Total gear ratios				
	Maximum for CVT * 1.	,	,					
	2. 3.							
	 Minimum for CVT *)							
	Reverse							
	* Continuously variable transmission.							
		speed (in km/h)(A 5% tolera	ance is permitted):					
	Speedometer Make							
		on and description of drive n						
		nt of the speedometer: e.g. pl						
		easuring mechanism of the s	speedometer:					
		on ratio or equivalent data:	and of diaplan.					
		eedometer scale or other form ce Make(s)/ Type(s): (for Pub						
•	speed display devi	cc wakc(s)/ Type(s). (101 Fub.	ne light bus only)					
	SUSPENSION							
	Type of the suspens							
		including all options)						
			e size designation, minimum					
	minimum speed cat Axles	legory symbor; for wheels in	dicate rim size(s) and off-set(8))				
	Axle 1:							

6.6.1.1.2. Axle 2:etc.

7. STEERING (Make And Type):

8. BRAKES

- 8.1. Type and characteristics of the brakes with a drawing:
- 8.2. Operating diagram, description and/or drawing of
- 8.2.1. Service braking system:
- 8.2.2. Secondary braking system:
- 8.2.3. Parking braking system:
- 8.2.4. Any additional braking system (if fitted e.g. retarder etc.):
- 8.5. Anti-lock braking system: yes/no/optional (1)

9. BODYWORK

- 9.5. Windscreen and other windows
- 9.5.1. Windscreen
- 9.5.1.1. Materials used (e.g. safety glass, safety plastic etc.) and standard (ECE, BS):
- 9.5.2. Other windows
- 9.5.2.1. Materials used (e.g. safety glass, safety plastic etc.) and standard (ECE, BS):
- 9.10.3. Seats (including seat, impact energy absorption material and fire resistance material)
- 9.10.3.1. Number of seat:
- 9.10.3.2. Drawing of seat's position and their arrangement (including controlled surface, restraining barrier

	etc):									
9.10.3.4.1	. Drawing of seat and the	neir a	anchorage:							
0.12	9.12. Safety belts and/or other restraint systems									
9.12. 9.12.1.	Safety belts and/or other restraint systems Number and position of safety belts and restraint systems and seats on which they can be used:									
7.12.1.	Declare the Belt adjustment device									
			Type-approval mark	Variant	for height					
			e.g. ECE, EC,BS etc.	(if applicable)	(indicate yes/no/optional)					
		L	e.g. 202, 20,22 etc.		(mareure yes, no, op aronar)					
	First row of seats	C								
		DR								
		L								
	$2^{nd} - 3^{rd}$ row of seats *	C								
		R								
	4 th –7 th row of seats *	L								
		С								
		L								
	L = left-hand side; R	c = ri	ght-hand side; $C = ce$	enter; $DR = Driver s$	eat					
			•		an two rows of seats or if					
			e seats across the width							
9.13			ease enclosed a test ce							
9.13.1.					d dimensions of the actual					
			es including the R-poir							
9.17.			d vehicle identification		1					
9.17.1.	Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the									
0.17.2	vehicle identification number: Photographs and/or drawings of the official part of the plates and inscriptions (completed example									
9.17.2.	with dimensions):		igs of the official part	of the plates and inscr	iptions (completed example					
9.17.3.			ngs of the chassis numb	ver (completed evempl	e with dimensions):					
9.17.3. 9.17.4.			of compliance with the		e with difficusions)					
9.17.4.1			shall be explained:	-						
× · · · · · · · · · · · · · · · · · · ·	The meaning of characters shall be explained									

10. LIG	HTING AND LIGHT-SIGNALLING DEVICES	
10 1	List of all devices (mentioning the number type approval	See ch

10.1. List of all devices(mentioning the number, type approval marks, colour, the corresponding tell-tale):

10.4. Dipped beam lamps
10.4.1. Value of initial adjustment

10.1	Category	Colour	No.	Circuit- closed tell-tale	Approval mark/number	Light source*
а	Main-beam Headlamp	White		Yes/No1	E / e / 自 /Other ¹ :	
b	Dipped-beam Headlamp	White		-	E / e / 自 /Other ¹ :	
c	Front Retro reflectors	Identical to incident light		-	E / e / 自 /Other ¹ :	
d	Front position lamps	White		Yes/No1	E / e / 自 /Other ¹ :	
e	Direction indicator lamps (Front) (Side) (Rear)	Amber		Yes/No ¹	E / e / 自 /Other ¹ : E / e / 自 /Other ¹ : E / e / 自 /Other ¹ :	
f	Hazard warning signal	Amber		Yes/No1	E / e / 自 /Other ¹ :	
g	Rear Position lamps	Red		Yes/No1	E / e / 自 /Other ¹ :	
h	Stop lamps (High mount)	Red		-	E / e / 自 /Other ¹ : E / e / 自 /Other ¹ :	
i	Rear registration plate lamp	White		-	E/e/ 自 /Other ¹ :	
j	Reversing lamps	White		-	E/e/ 自 /Other ¹ :	
k	Rear Retro reflectors	Red		-	E / e / 自 /Other ¹ :	

10.1	Category	Colour	No.	Circuit- closed tell-tale	Approval mark/number	Light source*
Optional d	levice (if present)	•				•
1	Front fog lamps	Yellow		Yes/No ¹	E/e/	
m	Daytime running lamps	White		-	E/e/	
n	Cornering lamps	White		-	E/e/	
0	Parking lamps	Front: white Rear: red or amber		-	E/e/自/Other ¹ :	
p	End-outline marker lamps	Front: white Rear: red		-	E/e/	
q	Side maker lamps	Amber; rearmost: red or amber		-	E/e/自/Other ^I :	
r	Side Retro reflectors	Amber; rearmost: red or amber		-	E/e/自/Other ¹ :	
S	Rear fog lamps	Red		Yes/No ¹	E/e/	

fitted:

13. SPECIAL PROVISIONS FOR VEHICLES USED FOR THE CARRIAGE OF PASSENGERS

	COMPRISING MORE THAN EIGHT SEATS IN ADDITION TO THE DRIVER'S SEAT
13.2.	Area for passengers
13.2.4.	Standing passengers:
13.3.	Number of passengers (seated and standing)
13.3.1.	Total:
13.3.2.	Upper deck (1):
13.3.3.	Lower deck (1):
13.4.	Number of passengers (seated)
13.4.1.	Total:
13.4.2.	Upper deck (1):
13.4.3.	Lower deck (1):
13.5.	Number of service doors:
13.6.	Number of emergency exits (doors, windows, escape hatches, intercommunication staircase and half
	staircase):
13.6.1.	Total:
13.6.2.	Upper deck (1):
13.6.3.	Lower deck (1):
13.7.	Volume of luggage compartments (m ³):
13.9.	Technical devices facilitating the access to vehicles (e.g. ramp, lifting platform, kneeling system),

Technical devices facilitating the access to vehicles (e.g. ramp, lifting platform, kneeling system), if

^{*}Light Source: "F" for filament lamp; "H" for HID lamp; "L" for LED

Summary of the construction standards and certificates

C111			Remarks
Sound level			
Exhaust Emission			
Speedometer			
Speed display device			
Safety Glass			
Seat(including seats'/controlled surfaces'/ restraining barriers' etc certificate and reports on impact energy absorption material and fire resistance material etc)			
Seat belts			
Seat belt anchorages			
Installation of lighting and signaling devices			
Headlamps			
Front retro reflector (non-triangle)			
Front position lamps, rear position lamps, stop lamps, daytime running lamps, side marker lamp, end-outline marker lamps,			
Direction indicator			
Rear registration plate lamp			
Reversing lamp			
Rear retro reflector (non-triangle)			
Front fog lamps	·		·
Cornering lamp	·		·
Parking lamp			<u> </u>
Side retro reflector (non-triangle)	·		·
Rear fog lamp			
	Speed display device Safety Glass Seat(including seats'/controlled surfaces'/ restraining barriers' etc certificate and reports on impact energy absorption material and fire resistance material etc) Seat belts Seat belt anchorages Installation of lighting and signaling devices Headlamps Front retro reflector (non-triangle) Front position lamps, rear position lamps, stop lamps, daytime running lamps, side marker lamp, end-outline marker lamps, Direction indicator Rear registration plate lamp Reversing lamp Rear retro reflector (non-triangle) Front fog lamps Cornering lamp Parking lamp Side retro reflector (non-triangle)	Speed display device Safety Glass Seat(including seats'/controlled surfaces'/ restraining barriers' etc certificate and reports on impact energy absorption material and fire resistance material etc) Seat belts Seat belt anchorages Installation of lighting and signaling devices Headlamps Front retro reflector (non-triangle) Front position lamps, rear position lamps, stop lamps, daytime running lamps, side marker lamp, end-outline marker lamps, Direction indicator Rear registration plate lamp Reversing lamp Rear retro reflector (non-triangle) Front fog lamps Cornering lamp Parking lamp Side retro reflector (non-triangle)	Speed display device Safety Glass Seat(including seats'/controlled surfaces'/ restraining barriers' etc certificate and reports on impact energy absorption material and fire resistance material etc) Seat belts Seat belt anchorages Installation of lighting and signaling devices Headlamps Front retro reflector (non-triangle) Front position lamps, rear position lamps, stop lamps, daytime running lamps, side marker lamp, end-outline marker lamps, Direction indicator Rear registration plate lamp Reversing lamp Rear retro reflector (non-triangle) Front fog lamps Cornering lamp Parking lamp Side retro reflector (non-triangle)

If those data required in this form is available in your test report/certificate whilst you can provide an hyperlink in this form to the test report and certificate in CD-ROM accomplished with this application, you are not required to repeat the data entry in this form.

* Deleted if not applicable

Authority Signatu	re :	
Post	:	
Company	:	
Date	:	Company chop

Notes

- (*) Please fill in here the upper and lower values for each variant.
- (1) Delete where not applicable (there are cases where nothing need be deleted when more than one entry is applicable).
- (b) If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the documentation by the symbol "?" (e.g. ABC??123??).
- (c) Classified according to the definitions listed in Annex 7 to the Consolidated Resolution on the Construction of Vehicle (R.E.3) or the vehicle approval standard in building such vehicle(e. M1/EU, Passenger Motor Vehicle//Japan etc.).
- (o) Mass of the vehicle with bodywork (if applicable) in running order including coolant, oils, fuel, spare wheels, tools and driver. The mass of the driver is 75 kg (according to ISO Standard 2416-1992) and the fuel tank is filled to 90 % and the other liquid containing systems (except those for used water) to 100 % of the capacity specified by the manufacturer.
- (Z2) Technically permissible maximum laden mass (M)' means the maximum mass of the vehicle based on its construction and performance, stated by the manufacturer.