

ETN

Directives for Completing the ETN Data Sheet

UPDATE 01.01.2003

Description of the features of an ETN request/approval (page 1).

Item No. on Pag 1	Features	Explanations	Abbreviation In EuroList
<u>A.</u>	<u>Company:</u>	Battery manufacturer.	
<u>B.</u>	<u>Type of ETN request:</u>	Apply for a new ETN. Use an existing ETN. Change the data of an existing ETN. Delete an existing ETN	
<u>C.</u>	<u>Application:</u>	Passenger cars and commercial vehicles are ticked correspondingly, other applications to be described.	
<u>D.</u>	<u>OEM and model:</u>	Enter vehicle manufacturer and main models.	
<u>E.</u>	<u>Aftermarket:</u>	Battery type for the aftermarket.	
<u>F.</u>	<u>Manufacturer declaration:</u>	The applicant has always to sign for each type of ETN request.	
<u>G.</u>	<u>Bureau of Numbering:</u>	Description of the outcome of the request.	

Description of the features of the ETN Data Sheet (page 2).

Item no. in data sheet	Features	Explanations	Abbreviation in EuroList
<u>1.</u>	<u>Electrical specifications</u>	According to EN 50 342 (was EN 60 095-1)	
1.1	Nominal voltage	U_n [V] 6V or 12V	
1.2	Nominal capacity	C_n [Ah]; Scale of fixed values see EN 50 342, Annex A – Group A	C_n
1.3	Nominal reserve capacity	$C_{r,n}$ [min] Option	$C_{r,n}$
1.4	Cold cranking current	I_{cc} [A]; Scale of fixed values see EN 50 342, Annex A – Group C	
1.4.1	for 12V batteries	I_{cc} [A] $U_{10} \geq 7.5V$	I_{cc}
1.4.2	for 6V batteries	I_{cc} [A] $U_{10} \geq 3.75V$	I_{cc}
1.4.3	Cold cranking	C1 $t_{6v} \geq 90s$	C
	Performance levels	C2 $C_{cc} \geq 0.2 C_{20}$	C

Description of the features of the ETN Data Sheet (page 2).

Item no. in data sheet	Features	Explanations	Abbreviation in EuroList
<u>2.</u>	<u>Mechanical specifications</u>		
2.1	Assembly	Chose terminal position (Annex 3)	ASS
2.2	Terminal type	Chose terminal design (Annex4a/b)	TER
2.3	Dimensions	According to EN 50 342, Annex A – Group B	
2.3.1	Maximum length	Overall length L [mm]	L
2.3.2	Maximum width	Overall width W [mm]	W
2.3.3	Height	see annex 6 (except for cover BL) h [mm]	h
2.3.4	Maximum height	Overall height H [mm]	H
2.4	Container material	Material used for container	
2.5	Battery size is in accordance with Eurosize	EN 60 095-2 / 60 095-4	Yes/type no/size SF 5 ---
2.6	Container		
2.6.1	Bottom hold-down	Moulded hold-downs B01, B... possibly in combination. (Annex 5)	SF 2
2.6.2	Handles outside	see annex 2 HL	SF 3
2.7	Cover		
2.7.1	Cover design		
	Block Lid	See annex 6 BL	SF 1
	Semi-Lid	See annex 6 SL	SF 1
	Flat Lid	See annex 6 FL	SF 1
2.7.2	Integrated Handles	See annex 2 IHL	SF 3
2.7.3	Integrated Vent	See annex 6 for standardised vent outlet IV	SF 1
	Central Degassing system	Any other outlet CD	SF 1
2.7.4	Location of IV and CD:	See annex 7	SF 1
2.7.5	Flame Arrester	Test in accord. with Draft IEC 1430 FA	SF 4
2.7.6	Spill-Proof:	Specification see page 4, Annex 2 SP	SF 4

Description of the features of the ETN Data Sheet (page 2).

Item no. in data sheet	Features	Explanations	Abbreviation in EuroList	
<u>3.</u>	<u>Test details:</u>	In accordance with EN 50 342		
3.1	Vibration resistance :	≥ 2h with 3g	V1	VB
		≥ 2h with 6g	V2	VB
		≥ 20h with 6g	V3	VB
3.2	Endurance resistance:	≥ 180 cycles	E1	ED
		≥ 5 week units	E2	ED
		≥ 8 week units	E3	ED
		OE specification (see annex 8)	OE	ED
3.3	Water loss :	Normal: ≥ 4 g/Ah	N	WL
		Low : < 4 g/Ah	L	WL
		Very Low : < 1 g/Ah	VL	WL
3.4	Valve Regulated	VR technology	VR	SF 4
3.5	Specification OE requirement Code:	See annex 8	OE	ED

<u>4.</u>	<u>Dates:</u>			
4.1	Issue date	Date of 1 st issue		
4.2	Updated on	Date of a possible modification		

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ETN Members and their Codes in the Euro List of ETN

Annex 1

BANNER	BA
DELPHI	DP
CENTURION ACCU	CA
FAAM	FA
HOPPECKE	HO
LECLANCHE	LE
YUASA	LY
MOLL	MO
SAENTIS	SE
ZAP	ZAP

ETN Group Members and their Codes in the Euro List of ETN

AUTOSIL	GR_AS
EXIDE	GR_EX
FIAMM	GR_FB
HAWKER	GR_HW
MUTLU	GR_MU
VARTA/BOSCH	GR_VB

In the Euro List are marked:

Date of 1 st issue	Year & Month
For the ETN initiator	"0"
For further users	"X"
For deleting an ETN	"d"

The additional * indicates that the production of this battery will stop in the near future.

Legend of Special Features in the EURO LIST of ETN

Annex 2

SF 1: Cover: BL; FL; SL

Central Degassing: CD

Integrated Vent IV

SF 2: Hold down: B00 (without hold down); B01; B03;
B04; B06; B07; B11; B12; B13; B14.

Remark: If the battery is delivered with adapters (fe.: hold down) it is recommended to mention the existing ETN on the battery or in the instructions.

SF 3: Handles HL (handle to container)

IHL (integrated handle to cover)

An existing ETN for "HL" can be also used if the design moves to "IHL". But it is not mandatory.
THE CONTRARY IS NOT PERMITTED.

SF 4: Flame Arrester: FA

Spill Proof: SP

- The battery shall be fully charged at 25°C, than be cleaned and dried. After that a charge voltage of 14,4 V has to be applied.
- The battery shall be turned upside down within one second and be placed in this position on a suction-paper, while the charge is continued.
- After 2 minutes no acid spill shall be determined on the suction-paper.

Valve Regulated: VR (VRLA)

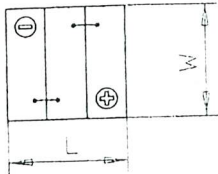
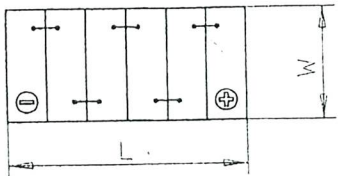
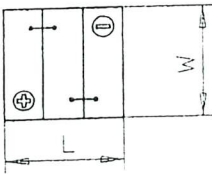
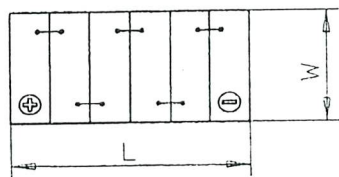
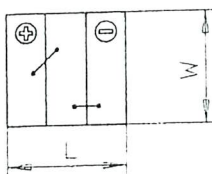
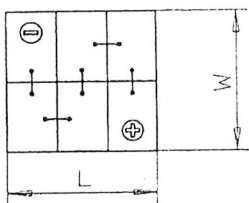
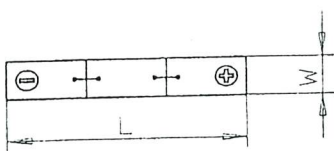
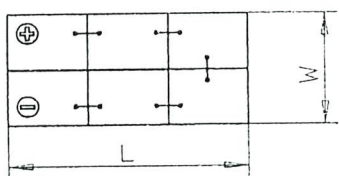
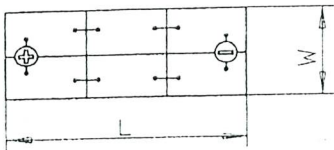
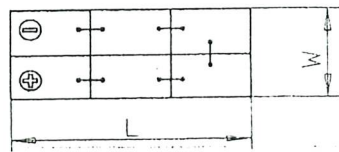
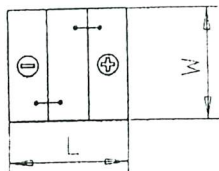
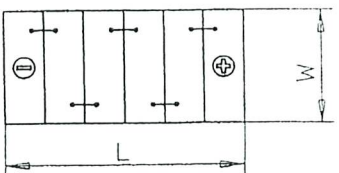
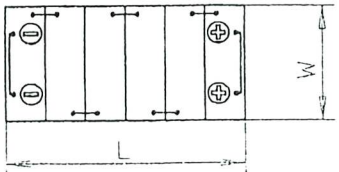
SF 5: L, LN, LS, LB, LBN,
LBS; E, ES, EB, EBS

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Assembly: cell arrangement, terminal positions

Annex 3

Code	6 Volt	12 Volt
0		
1		
2		
3		
4		
9		
10	N.A	

Handwritten notes: 11-13, 23-30

Terminal types for car and truck batteries

Annex 4a

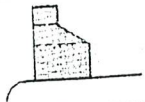
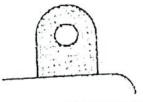
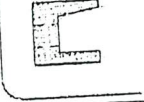
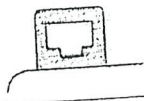
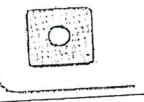
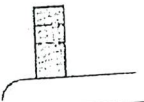
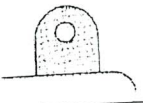
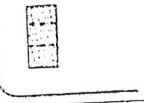
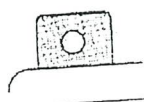
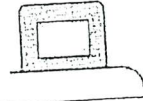
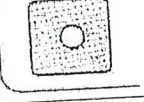
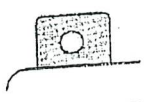
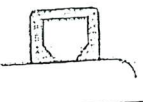
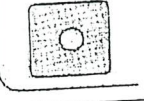
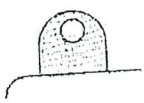
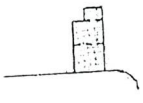
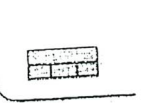
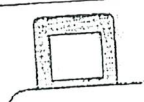
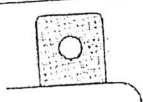
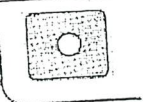
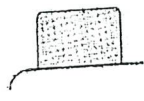
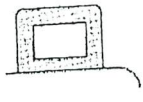
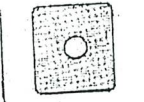
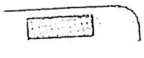
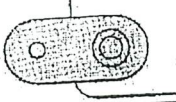
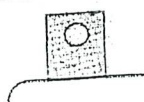
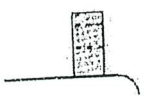
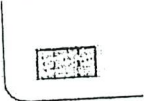
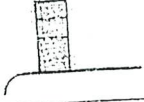
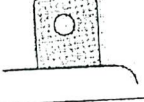
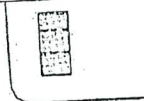
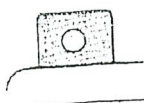
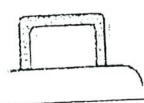
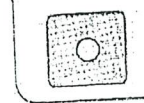
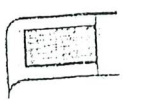
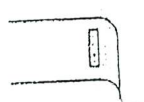
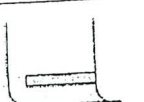
pos neg Terminal 1	Terminal 8
Terminal 3	Terminal 19
Terminal 4	neg pos Dimension as shown in fig. "terminal 1" Terminal 20
Terminal 5	Terminal K Terminal 21

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Annex 4b

Terminal types for motor cycle batteries

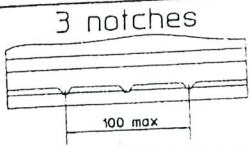
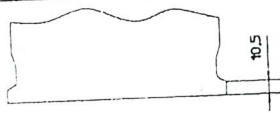
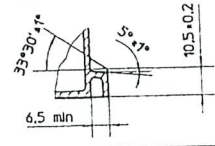
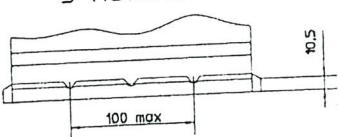
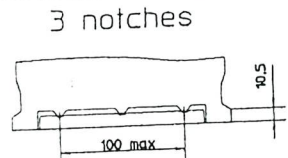
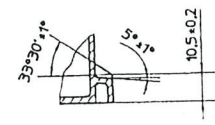
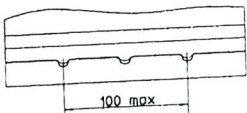
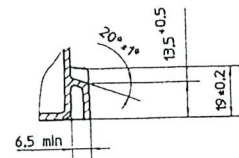
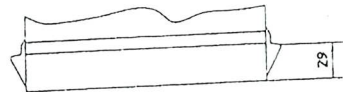
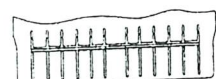
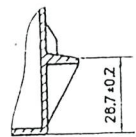
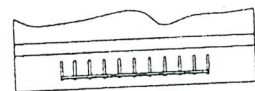
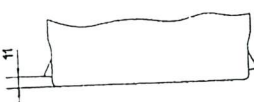
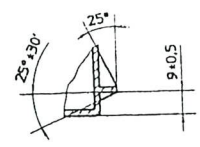
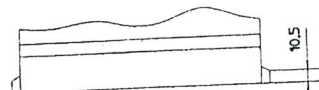
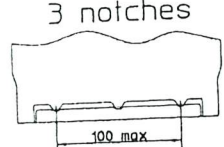
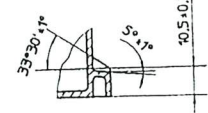
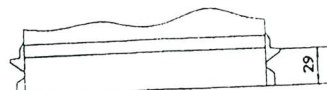
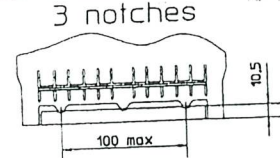
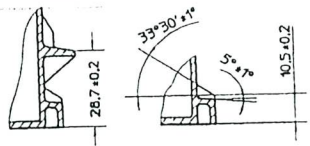
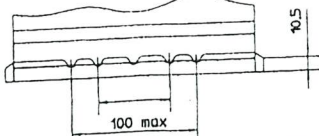
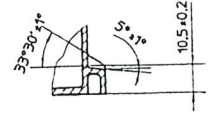
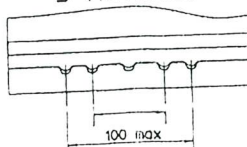
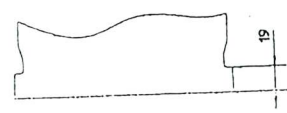
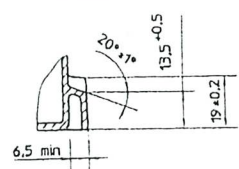
Type	Front	Side	Top
M 01			
M 02			
M 03			
M 04			
M 05			
M 06			
M 07			
M 08			
M 09			
M 10			
M 11			
M 12			
M 13			

Directives for Completing the ETN Data Sheet

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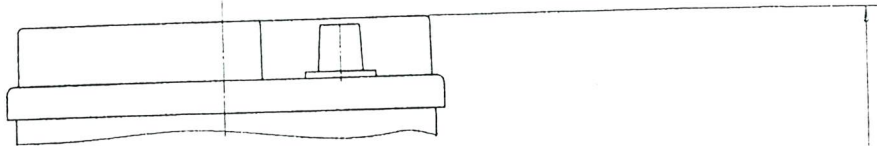
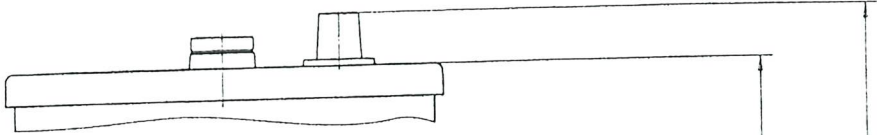
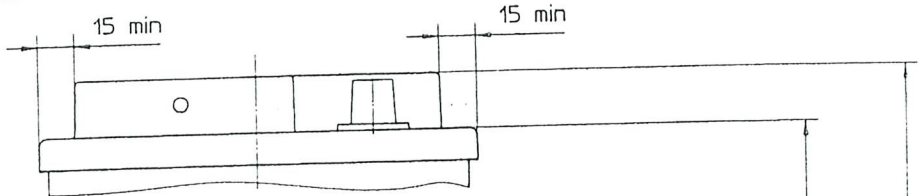
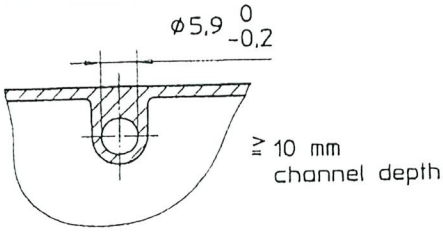
Base hold-down types and combinations

Annex 5

Code	/		
B 00	without hold down		
B 01			
B 03			
B 04			
B 06			
B 07			
B 11			
B 12			
B 13			
B 14			

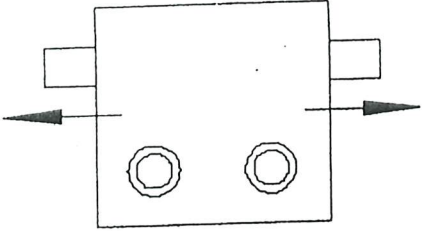
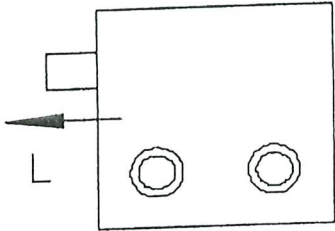
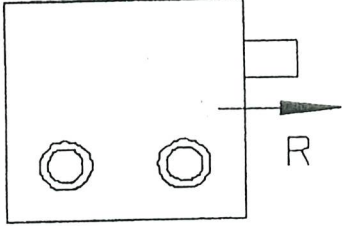
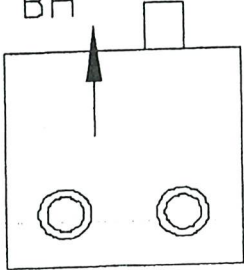
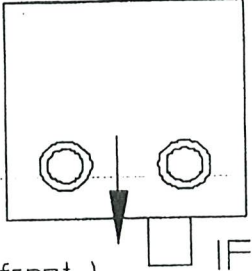
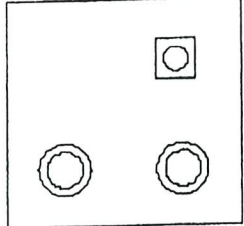
Lid Designs

Annex 6

Code	
BL	 Block lid of which the top of plugs, if any, and terminals are not higher than the max height of the battery
FL	 Flat lid with plugs or terminals higher than battery container
SL	 Semi lid as shown in fig. 'BL' but with a track for the hold down along the upper side of the battery
IV	 Specific central degassing cover for cars and commercial vehicles

Central Degassing, position of gas outlet

Annex 7

Code	CD and IV location
RL	 (both sides)
R or L	 (left)  (right)
BH or IF	 (behind)  (in front)
OT	 OT (on top)

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Legend of Endurance OE in the EURO LIST of ETN

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Annex 8

BMW Group	OE 01
PSA Group	OE 02
FIAT Group	OE 03
FORD	OE 04
DaimlerChrysler	OE 05
NISSAN	OE 06
OPEL Group	OE 07
PORSCHE	OE 08
RENAULT	OE 09
SAAB	OE 10
TOYOTA	OE 11
VOLVO	OE 12
VW Group	OE 13
MAN	OE 14

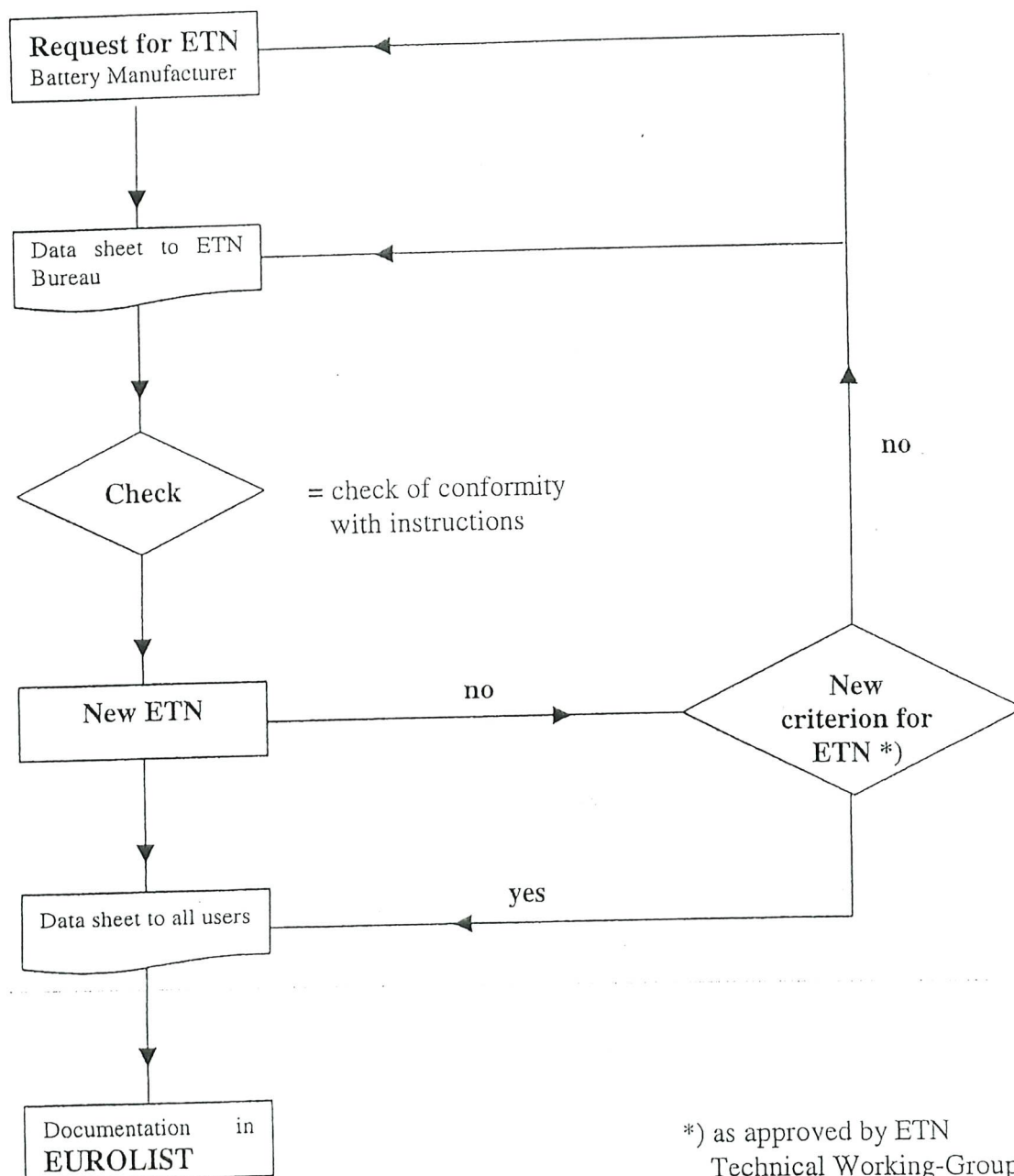
Remarks:

The OE requirement is valid for the OE endurance test at the date of setting the ETN number.
(Date of 1st issue, see annex 1)

For the ETN numbering with the characteristic "OE endurance" it is mandatory to get the permission of the OE customer that his endurance test may be published.

The Procedure for Request of ETN

Annex A



Directives for Completing the ETN Data Sheet

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Additional hold-down types, only for existing tools

Annex B

Code				
B 05	3 notches			
B 09				