

DIN EN 16102:2012-03 (E)

Intelligent transport systems - eCall - Operating requirements for third party support

Contents		Page
FOREWORD		4
INTRODUCTION		5
1 SCOPE		6
2 NORMATIVE REFERENCES		6
3 TERMS AND DEFINITIONS		6
4 SYMBOLS AND ABBREVIATED TERMS		10
5 HIGH LEVEL FUNCTIONAL REQUIREMENTS		11
5.1 General high level functional requirements		11
5.2 TPS-eCall generic architecture		12
5.3 TPS-eCall operation sequence		12
5.4 Privacy aspects		13
6 TRANSMISSION FROM VEHICLE ASPECTS		13
6.1 General requirements for the transmission from vehicle		13
6.2 Dual-channel transmission		14
6.3 Performance of the transmission		14
6.3.1 Performance criteria for the TPS-eCall service chain		14
6.3.2 Performance criteria for additional data		14
6.4 Routing of a TPS-eCall		14
6.5 Call back to vehicle		14
6.6 Termination of the voice call		14
6.7 Prioritisation of a TPS-eCall		14
6.8 Failure situations		15
7 DATA		15
7.1 Generic requirements for TPS-eCall data		15
7.2 Location data		15
7.2.1 Generic requirements for location data		15
7.2.2 Insufficient data provided by the GNSS system		15
7.2.3 Vehicle location		16
7.3 Optional additional data		16
7.4 Data to transmit to PSAP: TPS-eCall set of data		16
7.4.1 General		16
7.4.2 TPS-eCall-UID definition		17
7.4.3 TPS-eCall-SID definition		17
8 TPS IN-VEHICLE SYSTEM REQUIREMENTS		17
8.1 General TPS-IVS requirements		17
8.2 Modes of operation		17
8.3 Triggering		18
8.3.1 Triggering overview		18
8.3.2 Automatic triggering strategy		18
8.3.3 Manual triggering strategy		18
8.4 Termination of an in progress TPS-eCall		18
8.5 Set-up of the voice call		18
8.6 Call back function		19

8.7	Automatic voice call retry	19
8.8	Post crash performance of TPS in-vehicle equipment	19
8.9	Energy supply	20
8.10	In-vehicle Human Machine Interface (HMI) aspects	20
8.10.1	General	20
8.10.2	HMI aspects in the case of manual triggering	20
8.10.3	Alert of the vehicle occupants (automatically or manually triggered)	20
8.11	Antenna	20
9	SERVICE PROVIDER	21
9.1	Generic TPSP requirements	21
9.2	Operators	21
9.3	Automatic Call Distribution	21
9.4	Map accuracy at TPSP	21
9.5	Test of the data link between the carrier delivering the `IVS dataset' and the `TPSP eCall receiver'	21
9.6	Answering time	21
9.7	Reception of data without voice call	21
9.8	Procedures for answering the voice calls	22
9.9	Notifying the emergency services for their intervention	22
9.10	Linguistic aspects	22
9.11	TPSP call back number	22
9.12	Filing	23
9.13	Backup systems	23
9.14	Availability of the technical chain	23
9.15	Technical quality management procedures	23
10	TRANSMISSION OF THE EMERGENCY TO THE PSAPS	23
10.1	General requirements	23
10.2	Relevant contact details	24
10.3	Voice communication	24
10.4	Push transfer of a TPS-eCall set of data (TSD)	24
10.5	Transitional arrangements	25
11	TEST AND CONFORMANCE REQUIREMENTS	26
12	MARKING, LABELLING AND PACKAGING	26
ANNEX A (NORMATIVE) STANDARDISED DATA INTERFACE BETWEEN TPSP AND PSAP		27
A.2	FUNCTIONALITIES	27
A.2.1	The application acknowledgement (ack)	28
A.2.2	Authorization	29
A.2.3	The TPS-eCall messages	31
A.2.3.1	Push-INITIATION	31
A.2.3.2	Request emergency data	31
A.2.3.3	Push emergency data	32
A.2.3.4	Clear down	32
A.2.3.5	Communication control (Ping)	32
A.2.4	The PSAP web server wsdl file reference implementation	33
A.2.5	The TPSP web server wsdl file as reference implementation	37
A.2.6	XML codes of the TPS-eCall set of data for the TPSP/PSAP transmission	40
A.3	EUECALL_TPSECALL.XSD	41
ANNEX B (INFORMATIVE) TRANSITIONAL ARRANGEMENTS		44
ANNEX C (INFORMATIVE) XML CODE FOR ADDITIONAL INFORMATION		48
BIBLIOGRAPHY		53