

DIN EN 16072:2011-12 (E)

Intelligent transport systems - eSafety - Pan-European eCall operating requirements

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Conformance	7
3	Normative references	7
4	Terms and definitions	8
5	Symbols and abbreviations	11
6	High level functional requirements	12
6.1	General high level functional requirements	12
6.1.1	General	12
6.1.2	Linguistic aspects	12
6.1.3	High level In-Vehicle System requirements	13
6.1.4	eCall architecture	13
6.1.5	eCall operation sequence	13
6.2	eCall service chain	14
6.2.1	General	14
6.2.2	Actors in eCall service provision	14
6.2.3	Privacy aspects	14
6.2.4	Use of location and heading at PSAP	14
7	Operational requirements	15
7.1	General	15
7.2	Liability	15
7.3	Routing of an eCall	16
7.3.1	General	16
7.3.2	eCall 'flag'	16
7.3.3	eCall routing to PSAP	17
7.4	Prioritisation of an eCall	17
7.5	Post crash performance of in-vehicle equipment	17
7.6	Location and direction	17
7.6.1	Location data	17
7.6.2	Data concerning direction and location	18
7.6.3	Optional data regarding location and direction	18
7.7	Minimum Set of Data (MSD)	19
7.7.1	Data within the MSD	19
7.7.2	Optional additional data	19
7.8	Modes of operation for automatic triggered eCall	19
7.9	In-vehicle Human Machine Interface (HMI) aspects	20
7.9.1	General	20
7.9.2	HMI aspects in the case of automatic triggering	20
7.9.3	HMI aspects in the case of manual triggering	20
7.9.4	Alerting of initiated eCall (automatically or manually triggered)	20
7.10	Triggering	20
7.10.1	Automatic eCall triggering strategy	20
7.10.2	Manual eCall triggering strategy	21

7.10.3	Manual termination of eCall by vehicle occupants before trigger confirmation	21
7.11	Termination of an in progress eCall	21
7.12	Requirements to physical layer	21
7.12.1	Transport protocol	21
7.12.2	Performance requirements- time required to transmit data	21
7.12.3	End-to-end performance criteria	22
7.12.4	Performance criteria - Wireless network	22
7.12.5	Performance criteria - PSAP	22
7.13	Establish voice channel	23
7.13.1	General	23
7.13.2	Coverage issues	23
7.13.3	Roaming requirements for service	23
7.14	Acknowledgement of eCall	23
7.15	Continuing availability	23
7.16	PSAP response	23
7.17	eCall termination	23
7.17.1	General	23
7.17.2	IVS redial	24
7.17.3	PSAP call-back	24
7.17.4	Record transaction	24
8	Defences against attack	24
8.1	Call line security	24
8.2	Hoax calls	25
8.3	Denial of service attack	25
8.4	Malicious attack on PSAP	25
9	Different requirements for HGVs	25
10	Different requirements for 2 wheel vehicles	25
11	Test and conformance requirements	25
11.1	General	25
11.2	eCall conformance	26
11.3	In-vehicle equipment conformance	26
11.4	Network conformance	26
11.5	PSAP conformance	26
11.6	Interoperability conformance	27
12	Marking, labelling and packaging	27
	Bibliography	28