

# DIN EN 16062:2023-10 (E)

## Intelligent transport systems - ESafety - eCall high level application requirements (HLAP) using GSM/UMTS circuit switched networks

---

Contents	Page
European foreword .....	4
Introduction .....	5
1 Scope .....	7
2 Normative references .....	7
3 Terms and definitions .....	8
4 Symbols and abbreviations .....	11
5 Conformance .....	12
6 General overview of the eCall transaction for Pan European eCall .....	14
7 Requirements .....	18
7.1 General requirements .....	18
7.1.1 General .....	18
7.1.2 USIM .....	18
7.1.3 Enabled PSAP .....	18
7.1.4 IVS configured only for eCall .....	18
7.1.5 Self-test .....	19
7.1.6 Standby mode applicable to IVS configured for eCall only .....	19
7.2 Activation .....	19
7.2.1 Activation of pan-European eCall .....	19
7.2.2 Activation of a test eCall .....	20
7.3 Call set-up .....	20
7.3.1 General .....	20
7.3.2 IVS network access device (NAD) already registered on PLMN .....	20
7.3.3 eCall in progress .....	20
7.3.4 Network selection and registration .....	20
7.3.5 Authentication of the subscriber .....	21
7.3.6 eCall establishment .....	21
7.3.7 Cell localization (by network) .....	21
7.3.8 Manual termination of eCall by vehicle occupants before trigger confirmation .....	22
7.4 MSD transfer .....	22
7.4.1 General .....	22
7.4.2 Send initiation signal from IVS eCall modem to PSAP .....	23
7.4.3 eCall modem synchronization .....	23
7.4.4 Request MSD by PSAP eCall modem to IVS eCall modem .....	24
7.4.5 Send MSD from vehicle IVS to PSAP eCall modem .....	24
7.4.6 Link layer error check .....	24
7.4.7 Link layer ACK from PSAP eCall modem to IVS eCall modem .....	24
7.5 Application layer acknowledgement (AL-ACK) .....	25
7.5.1 Following transmission of the MSD to the eCall PSAP application .....	25
7.5.2 PSAP acknowledges the MSD .....	25
7.5.3 No receipt of application layer ACK .....	25
7.5.4 Form of presentation of the AL-ACK .....	25
7.6 PSAP request "SEND MSD" .....	27
7.6.1 General .....	27

7.6.2	<b>Before call clear-down</b>	27
7.6.3	<b>After call clear-down</b>	29
7.7	<b>(void)</b>	29
7.8	<b>Audio link to vehicle occupants</b>	29
7.9	<b>eCall clear-down</b>	29
7.10	<b>PSAP call back</b>	30
7.11	<b>Rerouting to another PSAP/emergency control centre</b>	30
7.12	<b>Handling non equipped situations / error cases</b>	31
7.12.1	<b>MSD not transmitted correctly</b>	31
7.12.2	<b>Network registration fails</b>	31
7.12.3	<b>Call failure before the MSD is sent and acknowledged</b>	31
7.12.4	<b>Mobile network not supporting eCall flag or not provided with routing tables</b>	31
7.12.5	<b>PSAP modem failure</b>	32
7.12.6	<b>PSAP network/ICT failure</b>	32
7.12.7	<b>PSAP application failure</b>	32
7.12.8	<b>PSAP operator does not respond</b>	32
7.12.9	<b>No response if line engaged</b>	33
7.12.10	<b>MSD not sent</b>	33
7.12.11	<b>MSD not received</b>	33
7.12.12	<b>Audio link not established</b>	33
7.12.13	<b>Audio link established but subsequently fails</b>	34
7.12.14	<b>Re-attempt in case of interrupted call</b>	34
7.12.15	<b>Automatic repeat attempts</b>	34
7.12.16	<b>IVS NAD does not receive call clear-down</b>	34
8	<b>Third party services supported eCall (TPS-eCall)</b>	34
9	<b>Defences against attack (Security provisions)</b>	35
10	<b>Quality of service requirements</b>	35
11	<b>Test and conformance requirements</b>	35
12	<b>Marking, labelling and packaging</b>	35
13	<b>Declaration of patents and intellectual property</b>	35
	<b>Annex A (normative) Table of timings</b>	36
	<b>Annex B (informative) (void)</b>	39
	<b>Annex C (informative) Test system strategies</b>	40
C.1	<b>General</b>	40
C.2	<b>Vehicle and PSAP equipment life cycle</b>	40
C.3	<b>Laboratory environment</b>	41
C.4	<b>OEM or third party test systems</b>	41
	<b>Bibliography</b>	43