



NSAI
Standards

Standard Recommendation
S.R. CEN/TS 16454:2013

Intelligent transport systems - ESafety - ECall end to end conformance testing

S.R. CEN/TS 16454:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:
CEN/TS 16454:2013

Published:
27 June, 2013

This document was published under the authority of the NSAI and comes into effect on:
27 June, 2013

ICS number:

03.220.20

35.240.60

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 35.240.60; 03.220.20

English Version

Intelligent transport systems - ESafety - ECall end to end conformance testing

Systèmes de transport intelligents - ESafety - De bout en
bout les essais de conformité

Intelligente Transportsysteme - eSicherheit - Vollständige
Konformitätsprüfungen für eCall

This Technical Specification (CEN/TS) was approved by CEN on 31 December 2012 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	8
Introduction	9
1 Scope	10
2 Conformance.....	10
2.1 General.....	10
2.2 General conditions	10
3 Normative references	11
4 Terms and definitions	13
5 Symbols and abbreviations	17
6 General overview of the eCall transaction for pan-European eCall	18
7 How to use this standard	22
7.1 Layout and procedures	22
7.2 System under test.....	23
7.3 Accelerated test procedures	23
7.4 Accelerated test procedures for IVS.....	24
7.4.1 Accelerated test procedures for all types of PE eCall IVS	24
7.4.2 Additional accelerated test procedures for PE eCall only IVS.....	25
7.5 Accelerated test procedures for MNOs	26
7.6 Accelerated test procedures for PSAPs – PE eCall	27
7.7 Accelerated test procedures for PSAPs – TPS-eCall.....	28
7.8 Accelerated test procedures for TPSPs	28
8 Requirements	28
8.1 Requirements - General objectives.....	28
8.1.1 State transitions	28
8.1.2 Classification of testing.....	39
8.1.3 CTP naming conventions.....	41
8.1.4 CTP naming convention for IVS conformance tests.....	42
8.2 CTP structure	42
9 Conformance test requirements for in-vehicle user equipment and systems (IVS)	44
9.1 Conformance test requirements for in-vehicle user equipment and systems for Pan European eCall	44
9.2 Test objectives and purposes	44
9.3 Classification of testing and referenced tests for in-vehicle user equipment for Pan European eCall IVS.....	44
9.3.1 Taxonomy of testing.....	44
9.3.2 Referenced tests	44
9.4 State transition conformance tests for in-vehicle equipment and system to comply to standards for pan European eCall	45
9.4.1 Conformance requirement.....	45
9.4.2 Use case test objectives by stage.....	45
9.4.3 CTP 1.1.0.1 Conformance to ETSI TS 102 936-1 and ETSI TS 102 936-2 – PE eCall IVS	48
9.4.4 CTP 1.1.0.2 Test for conformance to valid SIM/USIM – PE eCall	49
9.4.5 CTP 1.1.0.3 Automatic eCall triggering does not occur when ignition OFF – PE eCall IVS	50
9.4.6 CTP 1.1.1.1 Power on and self test – PE eCall IVS	51
9.4.7 CTP 1.1.2.1 eCall automatically activated – PE eCall IVS	52
9.4.8 CTP 1.1.2.2 Automatically triggered eCall in progress was not disconnected upon a new eCall trigger – PE eCall IVS.....	53

9.4.9	CTP 1.1.2.3	Post-side-crash performance of automatic trigger - IVS	54
9.4.10	CTP 1.1.2.4	Post-frontal-crash performance of automatic trigger - IVS	55
9.4.11	CTP 1.1.2.5	Performance of automatic trigger – different crash types - IVS.....	56
9.4.12	CTP 1.1.3.1	eCall manually activated – PE eCall IVS	57
9.4.13	CTP 1.1.3.2	Manually triggered eCall in progress was not disconnected upon a new eCall trigger – PE eCall IVS	58
9.4.14	CTP 1.1.4.1	Test eCall activated – PE eCall IVS	59
9.4.15	CTP 1.1.5.1	Network registration – PE eCall IVS	60
9.4.16	CTP 1.1.5.2	Manual termination of eCall by vehicle occupants not allowed (automatically triggered eCall) – PE eCall IVS.....	61
9.4.17	CTP 1.1.5.3	Manual termination of eCall by vehicle occupants not allowed (manually triggered eCall) – PE eCall IVS	62
9.4.18	CTP 1.1.5.4	Automatically triggered eCall in progress was not disconnected when ignition is switched to OFF – PE eCall IVS	63
9.4.19	CTP 1.1.5.5	Manually triggered eCall in progress was not disconnected when ignition is switched to OFF – PE eCall IVS	64
9.4.20	CTP 1.1.5.6	Priority over conflicting communication – PE eCall IVS.....	65
9.4.21	CTP 1.1.5.7	Network registration is re-tried when network registration attempt was not successful – PE eCall IVS.....	66
9.4.22	CTP 1.1.6.1	Mute IVS and vehicle audio – PE eCall IVS	66
9.4.23	CTP 1.1.7.1	Set-up TS12 call with eCall identifier (flag) set to ‘automatic’ – PE eCall IVS	67
9.4.24	CTP 1.1.8.1	Set-up TS12 call with eCall identifier (flag) set to ‘manual’ – PE eCall IVS.....	68
9.4.25	CTP 1.1.9.1	Set-up TS11 call to test number – PE eCall IVS	69
9.4.26	CTP 1.1.10.1	eCall is attempted when no networks are available (limited service condition) – PE eCall IVS	70
9.4.27	CTP 1.1.10.2	Re-dial attempt completed within 2 min after eCall is dropped – PE eCall IVS	71
9.4.28	CTP 1.1.10.3	Duration of eCall Initiation signal – PE eCall IVS	72
9.4.29	CTP 1.1.11.1	Send MSD with indicator set to ‘Automatically Initiated eCall’ (AleC) – PE eCall IVS	73
9.4.30	CTP 1.1.12.1	Send MSD with indicator set to ‘Manually Initiated eCall’ (MleC) – PE eCall IVS	74
9.4.31	CTP 1.1.13.1	Send MSD with indicator set to ‘Test Call’ – PE eCall IVS.....	75
9.4.32	CTP 1.1.14.1	Verify MSD transfer – PE eCall IVS	76
9.4.33	CTP 1.1.14.2	Un-mute IVS audio when AL-ACK received – PE eCall IVS	77
9.4.34	CTP 1.1.15.1	Establish voice link to PSAP – PE eCall IVS	78
9.4.35	CTP 1.1.15.2	MSD transfer request while eCall conversation in progress – PE eCall IVS	79
9.4.36	CTP 1.1.15.3	Call continuation when SEND MSD request not received (T5 expired) – PE eCall IVS	81
9.4.37	CTP 1.1.15.4	Call continuation when AL-ACK not received (T6 expired) – PE eCall IVS.....	82
9.4.38	CTP 1.1.15.5	MSD is transferred continuously until T7 expires and IVS reconnects loudspeaker and microphone on its expiry – PE eCall IVS.....	83
9.4.39	CTP 1.1.16.1	Clear down call automatically – PE eCall IVS	84
9.4.40	CTP 1.1.16.2	IVS clears down the eCall upon T2 expiry – PE eCall IVS	85
9.4.41	CTP 1.1.16.3	IVS registers recent eCalls – PE eCall IVS	86
9.4.42	CTP 1.1.17.1	Call-back allowed by IVS – PE eCall IVS.....	87
9.4.43	CTP 1.1.17.2	Call-back answered by IVS – PE eCall IVS	88
9.4.44	CTP 1.1.17.3	MSD transfer occurs upon PSAP request during call-back – PE eCall IVS	89
9.4.45	CTP 1.1.17.4	Remain registered for ≥ 1 hr – PE eCall IVS	90
9.5		State transition test scripts for in-vehicle equipment and system to comply to standards for pan European eCall – additional tests for eCall only systems	91
9.5.1	General		91
9.5.2	CTP 1.1.1.2	IVS does not perform registration after power-up – PE eCall only IVS.....	92
9.5.3	CTP 1.1.1.3	IVS periodically scans and maintains a list of available PLMNs – PE eCall only	92
9.5.4	CTP1.1.10.4	Verify that PLMN registration procedure is executed upon initiating an eCall – PE eCall only IVS	93
9.5.5	CTP 1.1.17.5	Remain registered for ≥ 1 hr ≤ 12 hr – PE eCall only IVS.....	94
9.6		State transition conformance test requirements for in-vehicle user equipment for eCall TPS-IVS via a third party service provider.....	95

9.6.1	General.....	95
9.6.2	Test objectives and purposes	95
9.6.3	Taxonomy of testing and referenced tests	95
9.6.4	Taxonomy of testing.....	95
9.7	Use case conformance tests for in-vehicle equipment and system to comply to standards for third party service provider eCall.....	95
9.7.1	Conformance requirement.....	95
9.7.2	Use case test objectives by stage.....	96
9.8	State transition test scripts for TPS in-vehicle equipment and system to comply to standards for third party services supported eCall	98
9.8.1	General.....	98
9.8.2	CTP 1.2.0 Pre operation - TPS-IVS	99
9.8.3	CTP 1.2.1 Power on self test - TPS-IVS	101
9.8.4	CTP 1.2.2 Automatically activate eCall - TPS-IVS.....	103
9.8.5	CTP 1.2.3 Manually activate eCall - TPS-IVS.....	111
9.8.6	CTP 1.2.4 Stop conflicting communication – TPS-IVS	115
9.8.7	CTP 1.2.5 Establish voice link to TPSP - TPS-IVS	116
9.8.8	CTP 1.2.6 Send IVS dataset to TPSP - TPS-IVS	120
9.8.9	CTP 1.2.7 Establish voice link between PSAP and occupants - TPS-IVS.....	124
9.8.10	CTP 1.2.8 Cleardown call - TPS-IVS.....	125
9.8.11	CTP 1.2.9 Allow call-cack into vehicle - TPS-IVS.....	126
10	Conformance tests for mobile network operators	130
10.1	Test objectives and purposes	130
10.1.1	General.....	130
10.1.2	Default assumptions	130
10.2	Taxonomy of testing and referenced tests	130
10.3	Use case conformance tests for mobile network operator systems to comply to standards for pan European eCall	130
10.3.1	Conformance requirement.....	130
10.3.2	Use case test objectives by stage.....	130
10.4	State transition test scripts for mobile network operators to demonstrate compliance with Pan European eCall standards.....	132
10.4.1	General.....	132
10.4.2	CTP 2.0.1 Keep SIMs/USIMs alive even though not in regular operation – MNO.....	133
10.4.3	CTP 2.0.2 MNO supports general eCall relevant requirements	134
10.4.4	CTP 2.0.3 Decommission SIM/USIM - MNO	135
10.4.5	CTP 2.0.4 Support eCall Flag – MNO	136
10.4.6	CTP 2.1.1 Accept registration – Home network – MNO	137
10.4.7	CTP 2.1.2 Accept registration – Roaming –MNO.....	138
10.4.8	CTP 2.2.1.1 Receive TS12 voice call (automatically initiated) – MNO	139
10.4.9	CTP 2.2.1.2 Route call to ‘most appropriate’ PSAP – MNO	140
10.4.10	CTP 2.2.1.3 Provide TS12 data/caller ID – MNO.....	141
10.4.11	CTP 2.2.2.1 Receive TS12 voice call (manual initiated) – MNO.....	142
10.4.12	CTP 2.2.3.1 Test for receiving test eCall (TS11)	143
10.4.13	CTP 2.2.3.2 Route call to non-emergency number – MNO	144
10.4.14	CTP 2.2.3.3 Provide TS11 data – MNO.....	145
10.4.15	CTP 2.3.1 Call in progress–MNO	145
10.4.16	CTP 2.4.1 Call cleardown – MNO.....	146
10.4.17	CTP 2.5.1 Support call-back – MNO.....	147
10.4.18	CTP 2.6.1 Maintain registration for 1-12 h – MNO	147
10.4.19	CTP 2.7.1 Maintain call records - MNO	147
10.5	Use case conformance tests for mobile network operator systems to comply to standards for TPS-eCall	148
10.5.1	Conformance requirement.....	148
10.5.2	Use case test objectives by stage.....	148
10.6	State transition test scripts for mobile network operators to demonstrate compliance with TPS-eCall standards.....	149
10.6.1	CTP 2.11.1 MNO supports general TPS-eCall relevant requirements	149
10.6.2	CTP 2.11.2 Support call-back – MNO.....	150
11	Conformance tests for PSAP systems	151

11.1	Test objectives and purposes	151
11.2	Taxonomy of testing and referenced tests	151
11.2.1	Taxonomy of testing	151
11.2.2	Referenced tests.....	151
11.3	Use case conformance tests for PSAP systems to comply to standards for pan European eCall	151
11.3.1	Conformance requirement.....	151
11.3.2	Use case test objectives by stage	151
11.4	State transition conformance tests for PSAPs – PE eCall.....	152
11.4.1	General	152
11.4.2	CTP 3.1.0.1 Provide MNOs with appropriate routing data – PSAP PE eCall	154
11.4.3	CTP 3.1.0.2 Maintain map geo-information – PSAP PE eCall	155
11.4.4	CTP 3.1.1.1 Receive automatically initiated eCall – PSAP PE eCall.....	156
11.4.5	CTP 3.1.1.2 Receive manually initiated eCall – PSAP PE eCall	157
11.4.6	CTP 3.1.2 Receive TS12 data- Caller ID & location – PSAP PE eCall.....	158
11.4.7	CTP 3.1.3.1 Recognise eCall and route to in-band modem – PSAP PE eCall	159
11.4.8	CTP 3.1.3.2 PSAP equipment failure – PSAP PE eCall	160
11.4.9	CTP 3.1.3.3 PSAP modem failure before link layer ACK is sent – PSAP PE eCall	161
11.4.10	CTP 3.1.4 eCall received at in-band modem – PSAP PE eCall	162
11.4.11	CTP 3.1.5.1 Validate initiation signal – PSAP PE eCall.....	163
11.4.12	CTP 3.1.5.2 Route to operator after T4 expiration – PSAP PE eCall	164
11.4.13	CTP 3.1.6 Request MSD – PSAP PE eCall.....	165
11.4.14	CTP 3.1.7.1 Receive MSD – PSAP PE eCall	166
11.4.15	CTP 3.1.7.2 Verify status bit in AL-ACK upon positive ACK– PSAP PE eCall	167
11.4.16	CTP 3.1.7.3 Verify MSD transfer upon T8 expiration – PSAP PE eCall	168
11.4.17	CTP 3.1.7.4 Verify transfer of corrupted MSD – PSAP PE eCall	169
11.4.18	CTP 3.1.7.5 Verify PSAP behaviour when MSD format check fails– PSAP PE eCall.....	170
11.4.19	CTP 3.1.8 ACK – PSAP PE eCall	170
11.4.20	CTP 3.1.9 Route voice and MSD to operator – PSAP PE eCall.....	171
11.4.21	CTP 3.1.10 Display TS12 data and MSD to operator – PSAP PE eCall	172
11.4.22	CTP 3.1.11 Decode VIN – PSAP PE eCall	173
11.4.23	CTP 3.1.12 Talk to vehicle occupants – PSAP PE eCall	174
11.4.24	CTP 3.1.13 Request new MSD before call clear-down – PSAP PE eCall.....	175
11.4.25	CTP 3.1.14.1 Call clear-down – PSAP PE eCall	176
11.4.26	CTP 3.1.14.2 Verify status bit in AL-ACK upon clear-down - PSAP –PE eCall.....	177
11.4.27	CTP 3.1.15 Call-back to vehicle – PSAP PE eCall	178
11.4.28	CTP 3.1.16 Request new MSD after call clear-down – PSAP PE eCall.....	179
11.5	State transition conformance tests for PSAPs – TPS-eCall	180
11.5.1	General	180
11.5.2	CTP 3.2.0.1 TPSP – PSAP agreement – PSAP TPS eCall	181
11.5.3	CTP 3.2.0.2 Provide areas of responsibility and contact numbers to approved TPSPs – PSAP TPS-eCall	182
11.5.4	CTP 3.2.0.3 Agreement on necessary language support – PSAP TPS eCall	184
11.5.5	CTP 3.2.0.4 Agree electronic data connection and provide details to approved TPSPs – PSAP TPS eCall	185
11.5.6	CTP 3.2.0.5 Provide PSAP data addresses and security access to approved TPSPs – PSAP TPS eCall	187
11.5.7	CTP 3.2.1 Receive eCall notification from TPSP (not TS12) –PSAP TPS eCall.....	188
11.5.8	CTP 3.2.2 Route call to operator – PSAP TPS eCall	189
11.5.9	CTP 3.2.3 Connection, TSD transmission, display relevant information to PSAP operator –PSAP TPS-eCall	190
11.5.10	CTP 3.2.4 PSAP Operator: Talk with TPSP operator and receive relevant information – PSAP TPS eCall	192
11.5.11	CTP 3.2.5 Talk to vehicle occupants – PSAP TPS-eCall.....	193
11.5.12	CTP 3.2.6 Request new TSD before call clear-down –PSAP TPS-eCall	194
11.5.13	CTP 3.2.7 Inform TPSP that call can be ended – PSAP TPS eCall	195
11.5.14	CTP 3.2.8 Call clear-down with TPSP –PSAP TPS-eCall	196
11.5.15	CTP 3.2.9 Call-back to TPSP – PSAP TPS-eCall.....	197
11.5.16	CTP 3.2.10 Call-back to vehicle – PSAP TPS eCall	198
11.5.17	CTP 3.2.11 Call clear-down with vehicle – PSAP TPS eCall.....	199

12	State transition conformance tests for TPS-eCall	200
12.1	Related specifications and conformance requirements.....	200
12.2	TPSP general tests (applicable to both TPS-eCall responder and TPS-eCall notifier).....	200
12.2.1	General.....	200
12.2.2	CTP 4.0.1 Agree service level agreement and/or standard ways of working with PSAPs – TPSP.....	202
12.2.3	CTP 4.0.2 Receive PSAP areas of responsibility and contact numbers – TPSP.....	203
12.2.4	CTP 4.0.3 Agree necessary language support – TPSP.....	204
12.2.5	CTP 4.0.4 Agree electronic data connection details with PSAPs – TPSP	206
12.2.6	CTP 4.0.5 Evidence quality procedures – TPSP	207
12.2.7	CTP 4.0.6 Verify automatic call distribution (ACD) system – TPSP	210
12.2.8	CTP 4.0.7 Check link from MNO – TPSP.....	211
12.2.9	CTP 4.0.8 Deal with transmission failures – TPSP.....	211
12.2.10	CTP 4.0.9 Update GIS – TPSP.....	212
12.2.11	CTP 4.0.10 Protection of privacy – TPSP	212
12.3	TPS-eCall responder tests – TPS-R	213
12.3.1	General.....	213
12.3.2	CTP 4.1.1 Receive TPS-eCall from vehicle – TPS-R.....	214
12.3.3	CTP 4.1.2 Process incoming call – TPS-R.....	216
12.3.4	CTP 4.1.3 Talk with vehicle occupants and receive relevant information – TPS-R	218
12.3.5	CTP 4.1.4 Trigger PSAP notification – TPS-R.....	221
12.3.6	CTP 4.1.5 Make voice connection between vehicle and PSAP if required – TPS-R	221
12.3.7	CTP 4.1.6 Confirmation received from PSAP that call with vehicle can be ended – TPS- R.....	222
12.3.8	CTP 4.1.7 Call clear-down with vehicle – TPS-R.....	223
12.3.9	CTP 4.1.8 Call-back to vehicle – TPS-R.....	224
12.4	TPS-eCall notifier tests – TPS-N.....	225
12.4.1	General.....	225
12.4.2	CTP 4.2.1 Emergency situation likely to require assistance – TPS-N	226
12.4.3	CTP 4.2.2 Establish contact with PSAP – TPS-N.....	226
12.4.4	CTP 4.2.3 Talk with PSAP operator and notify relevant information – TPS-N.....	231
12.4.5	CTP 4.2.4 Establish voice link between PSAP and vehicle occupants if required by PSAP – TPS-N	233
12.4.6	CTP 4.2.5 Respond to electronic data update request – TPS-N	235
12.4.7	CTP 4.2.6 PSAP informs that call can be ended – TPS-N.....	235
12.4.8	CTP 4.2.7 Call clear-down to PSAP – TPS-N	235
12.4.9	CTP 4.2.9 Call-back from PSAP – TPS-N.....	235
13	Marking, labelling and packaging	236
14	Declaration of patents and intellectual property	236
Annex A	(normative) Proforma conformance test report for Pan European eCall in-vehicle system (IVS).....	237
A.1	Conformance test report.....	237
A.1.1	System under test:	237
A.1.2	System under test identification	237
A.1.3	Testing environment	238
A.1.4	Limits and reservation	238
A.1.5	Comments	238
A.2	SUT conformance status	239
A.3	Static conformance summary	239
A.4	Dynamic conformance summary	239
A.5	Static conformance review report.....	240
A.6	Test campaign report	241
A.7	Observations	242
Annex B	(normative) ProForma conformance test report for Third Party Service Provider In- Vehicle System (TPS-IVS).....	243
B.1	Conformance test report.....	243
B.1.1	System under test:	243
B.1.2	System under test identification	243
B.1.3	Testing environment	244

B.1.4	Limits and reservation	244
B.1.5	Comments	244
B.2	SUT conformance status	245
B.3	Static conformance summary	245
B.4	Dynamic conformance summary	245
B.5	Static conformance review report	246
B.6	Test campaign report	247
B.7	Observations.....	247
Annex C	(normative) ProForma conformance test report for mobile network operator (MNO)	248
C.1	Conformance test report.....	248
C.1.1	System under test:	248
C.1.2	System under test identification	248
C.1.3	Testing environment	249
C.1.4	Limits and reservation	249
C.1.5	Comments	249
C.2	SUT conformance status	250
C.3	Static conformance summary	250
C.4	Dynamic conformance summary	250
C.5	Static conformance review report	251
C.6	Test campaign report	252
C.7	Observations.....	252
Annex D	(normative) ProForma conformance test report for public service answering point (PSAP).....	253
D.1	Conformance test report.....	253
D.1.1	System under test:	253
D.1.2	System under test identification	253
D.1.3	Testing environment	254
D.1.4	Limits and reservation	254
D.1.5	Comments	254
D.2	SUT conformance status	255
D.3	Static conformance summary	255
D.4	Dynamic conformance summary	255
D.5	Static conformance review report	256
D.6	Test campaign report	257
D.7	Observations.....	258
Annex E	(normative) ProForma conformance test report for third party service provider (TPS-eCall)	259
E.1	Conformance test report.....	259
E.1.1	System under test:	259
E.1.2	System under test identification	259
E.1.3	Testing environment	260
E.1.4	Limits and reservation	260
E.1.5	Comments	260
E.2	SUT conformance status	261
E.3	Static conformance summary	261
E.4	Dynamic conformance summary	261
E.5	Static conformance review report	262
E.6	Test campaign report	263
E.7	Observations.....	264
	Bibliography.....	265

Foreword

This document (CEN/TS 16454:2013) has been prepared by Technical Committee CEN/TC 278 “Road transport and traffic telematics”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

An *eCall* is an emergency call generated either automatically via activation of in-vehicle sensors or manually by the *vehicle occupants*; when activated, to provide notification and relevant location information to the most appropriate *Public Safety Answering points* (PSAP), by means of *mobile wireless communications networks* and carries a defined standardized *minimum set of data*, notifying that there has been an incident that requires response from the emergency services and establishes an audio channel between the occupants of the vehicle and the *most appropriate PSAP*.

NOTE 1 EN 15722 specifies a standardized MSD for *eCall*, EN 16062 specifies high level application protocols for *eCall* and EN 16072 specifies pan-European *eCall* operating requirements. For third party systems, EN 16102 specifies third party services supporting *eCall* operating requirements (See EC Communication on *eCall* Implementation 2009 [COM(2009) 434 final] for more information).

The operating requirements for pan-European *eCall* are made using Public Land Mobile Networks (PLMN) (such as GSM and 3G), as specified in a number of ETSI standards and technical specifications.

This deliverable provides tests to enable actors in the *eCall* chain to be able to claim conformance to the *eCall* standards, even though they are unable to control the behaviour of systems of other actors in the *eCall* chain.

NOTE 2 Conformance tests in this document allow demonstration that a system complies with the *eCall* standards. Compliance to standards is a prerequisite to providing an interoperable compliant system, but do not by themselves demonstrate that a system will function nor guarantee the quality of service.

NOTE 3 The term PSAP (Public Safety Assistance Point), which is most widely used in the *eCall* documentation, European Commission documents etc., is used throughout this document and equates to the term *emergency call response centre* used in the ITS Implementation Directive.

The European Committee for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this European Standard may involve the use of patents concerning *eCall* given in EN 16062 and various ETSI standards for the network access device and cellular mobile networks.

CEN takes no position concerning the evidence, validity and scope of these patent rights.

1 Scope

This Technical Specification defines the key actors in the eCall chain of service provision as:

- 1) In-Vehicle System (IVS)/vehicle,
- 2) Mobile network Operator (MNO),
- 3) Public safety assistance point [provider](PSAP),

in some circumstances may also involve:

- 4) Third Party Service Provider (TPSP),

and to provide conformance tests for actor groups 1) – 4).

NOTE Conformance tests are not appropriate nor required for vehicle occupants, although they are the recipient of the service.

The Scope covers conformance testing (and approval) of new engineering developments, products and systems, and does not imply testing associated with individual installations in vehicles or locations.

2 Conformance

2.1 General

This Technical Specification provides conformance tests for each of the key actor groups such that each actor group may be able to ascertain if it is in conformance with the eCall standards deliverables, and to demonstrate its conformance to eCall standards requirements relevant to that actor group.

Where a supplier elects to claim conformance that its product or service is in accordance with the provisions of this document, it shall only do so if it can evidence that it has undertaken the test procedures relevant to its product(s) and/or service(s) as defined herein and has met all of the PASS criteria requirements defined in the tests appropriate to its product(s) and/or service(s) that are defined herein.

2.2 General conditions

A CTP-PASS condition is only confirmed if ALL individual pass conditions written in the “pass conditions” column of a given CTP (conformance test procedure) are observed.

A CTP-FAIL condition occurs if one or more of the given individual pass conditions written in the “pass conditions” column of a given CTP are *not* observed (failed).

To be explicitly clear, if a supplier has undertaken the test procedures relevant to its product(s) and/or service(s) as defined herein and has NOT MET all of the PASS criteria requirements defined in the tests appropriate to its product and/or service(s) that are defined herein, i.e. its product or service has failed ANY of the tests relevant to its product or service according to the methods and criteria determined herein, it SHALL NOT claim compliance to this document. A supplier shall not claim ‘partial compliance’ nor ‘compliance to selected tests’ of this document.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-