ETSI TS 102 843 V1.1.1 (2014-01)

Digital Enhanced Cordless Telecommunications (DECT);
New Generation DECT;
Additional feature set nr.1
for extended wideband speech services;
Profile Test Specification (PTS) and Test Case Library (TCL)

Reference
DTS/DECT-NG0264

Keywords
DECT, codec, GAP, IMT-2000, interoperability,
IP, profile, speech, testing

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Contents

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://ipr.etsi.org).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Digital Enhanced Cordless Telecommunications (DECT).

The present document is based on EN 300 175 parts 1 [1] to 8 [8], EN 300 444 [12], TS 102 527-1 [13], TS 102 527-3 [14] and TS 102 527-5 [15]. General attachment requirements and speech attachment requirements are based on EN 300 176-1 [9], EN 301 406 [11] (replacing TBR 006 [i.2]) and EN 300 176-2 [10] (previously covered by TBR 010 [i.3]). Further details of the DECT system may be found in TR 101 178 [i.1].

The information in the present document is believed to be correct at the time of publication. However, DECT standardization is a rapidly changing area, and it is possible that some of the information contained in the present document may become outdated or incomplete within relatively short time-scales.

1 Scope

The present document contains the Profile Test Specification (PTS) and the Test Case Library (TCL) for "New Generation DECT; Part 5: Additional feature set nr. 1 for extended wideband speech" (TS 102 527-5 [15]). The present document covers both the Portable (PT) and the Fixed (FT) Radio terminations.

The present document is defined as an extension of TS 102 841 [16], so the numbering and order of figures and tables in the present document is aligned with the corresponding numbering and order of figures and tables in TS 102 841 [16].This also applies to the numbering of tables in the annexes (and especially in annex A).

The Test Case Library (TCL) covers also some test cases for "DECT New Generation; part 1; Wideband speech" (TS 102 527-1 [13]), "DECT New Generation; part 3; Extended wideband speech" (TS 102 527-3 [14]) and for the "Generic Access Profile" (EN 300 444 [12]). This is done because such test cases are mandatory or especially relevant for New Generation DECT part 5 (see TS 102 527-5 [15]), and are not covered by existing GAP test specifications.

Due to the ascending compatibility of DECT profiles, all New Generation DECT part 5 devices (see TS 102 527-5 [15]), are required to be also compliant with "DECT New Generation; part 3; Extended wideband speech" (see TS 102 527-3 [14]), "DECT New Generation; part 1; Wideband speech" (TS 102 527-1 [13]) and with the "Generic Access Profile" (GAP, EN 300 444 [12]). Annex E of the present document specifies the modifications to GAP test cases for requirements and tests that are optional in GAP test specifications (see note), but that become mandatory to support the corresponding GAP features in New Generation DECT Part 5.

NOTE: The industry de-facto standard practice for ensuring the compliance to GAP [12] is the use of TBR 022 [i.4] amended by TBR 022/A1 [i.5], even although these two documents no longer have their initial regulatory significance. TBR 022 [i.4] relies on the GAP Profile Test Specification (EN 300 494 parts 1 [i.6] to 3 [i.8]) and on the DECT Test Case Library (EN 300 497 parts 1 [i.9] to 9 [i.17]). The GAP test suite also includes the GAP Profile Implementation Conformance Statement (PICS) (EN 300 474 parts 1 [i.25] and 2 [i.26]) and the DECT Common Interface (CI) Profile Implementation Conformance Statement (PICS) (EN 300 476 parts 1 [i.18] to 7 [i.24]).

The objective of the present document is to provide a basis for approval tests of NG DECT Part 5 equipment giving a high probability of air interface inter-operability between different manufacturer's DECT equipment.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are necessary for the application of the present document.

[1] ETSI EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".

[2] ETSI EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".

[3] ETSI EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".

[4] ETSI EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".

[5] ETSI EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".

[6] ETSI EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".

[7] ETSI EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".

[8] ETSI EN 300 175-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech and audio coding and transmission".

[9] ETSI EN 300 176-1: "Digital Enhanced Cordless Telecommunications (DECT); Test specification; Part 1: Radio".

[10] ETSI EN 300 176-2: "Digital Enhanced Cordless Telecommunications (DECT); Test specification; Part 2: Audio and speech".

[11] ETSI EN 301 406: "Digital Enhanced Cordless Telecommunications (DECT); Harmonized EN for Digital Enhanced Cordless Telecommunications (DECT) covering the essential requirements under article 3.2 of the R&TTE Directive; Generic radio".

[12] ETSI EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

[13] ETSI TS 102 527-1: "Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 1: Wideband Speech".

[14] ETSI TS 102 527-3: "Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 3: Extended wideband speech services".

[15] ETSI TS 102 527-5: "Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 5: Additional feature set nr. 1 for extended wideband speech services".

[16] ETSI TS 102 841: "Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Extended wideband speech services; Profile Test Specification (PTS) and Test Case Library (TCL)".

[17] ETSI TS 123 038 (V11.0.0) (2012-10):"Digital cellular telecommunications system (Phase 2+);Universal Mobile Telecommunications System (UMTS); LTE;Alphabets and language-specific information (3GPP TS 23.038 version 11.0.0 Release 11)".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] ETSI TR 101 178: "Digital Enhanced Cordless Telecommunications (DECT); A high Level Guide to the DECT Standardization".

[i.2] ETSI TBR 006: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements".

[i.3] ETSI TBR 010: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements: Telephony applications".

[i.4] ETSI TBR 022: "Radio Equipment and Systems (RES); Attachment requirements for terminal equipment for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) applications".

[i.5] ETSI TBR 022/A1: Amendment to: "Radio Equipment and Systems (RES); Attachment requirements for terminal equipment for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) applications".

[i.6] ETSI EN 300 494-1: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 1: Summary".

[i.7] ETSI EN 300 494-2: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 2: Profile Specific Test Specification (PSTS) - Portable radio Termination (PT)".

[i.8] ETSI EN 300 494-3: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".

[i.9] ETSI EN 300 497-1: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Test Case Library (TCL); Part 1: Test Suite Structure (TSS) and Test Purposes (TP) for Medium Access Control (MAC) layer".

[i.10] ETSI EN 300 497-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 2: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Portable radio Termination (PT)".

[i.11] ETSI EN 300 497-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 3: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Fixed radio Termination (FT)".

[i.12] ETSI EN 300 497-4: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Test Case Library (TCL); Part 4: Test Suite Structure (TSS) and Test Purposes (TP) - Data Link Control (DLC) layer".

[i.13] ETSI EN 300 497-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 5: Abstract Test Suite (ATS) - Data Link Control (DLC) layer".

[i.14] ETSI EN 300 497-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 6: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Portable radio Termination (PT)".

[i.15] ETSI EN 300 497-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 7: Abstract Test Suite (ATS) for Network (NWK) layer - Portable radio Termination (PT)".

[i.16] ETSI EN 300 497-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 8: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Fixed radio Termination (FT)".

[i.17] ETSI EN 300 497-9: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI);Test Case Library (TCL); Part 9: Abstract Test Suite (ATS) for Network (NWK) layer - Fixed radio Termination (FT)".

[i.18] ETSI EN 300 476-1: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 1: Network (NWK) layer - Portable radio Termination (PT)".

[i.19] ETSI EN 300 476-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 2: Data Link Control (DLC) layer - Portable radio Termination (PT)".

[i.20] ETSI EN 300 476-3: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 3: Medium Access Control (MAC) layer - Portable radio Termination (PT)".

[i.21] ETSI EN 300 476-4: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 4: Network (NWK) layer - Fixed radio Termination (FT)".

[i.22] ETSI EN 300 476-5: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 5: Data Link Control (DLC) layer - Fixed radio Termination (FT)".

[i.23] ETSI EN 300 476-6: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 6: Medium Access Control (MAC) layer - Fixed radio Termination (FT)".

[i.24] ETSI EN 300 476-7: "Digital Enhanced Cordless Telecommunications (DECT);Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 7: Physical layer".

[i.25] ETSI EN 300 474-1: "Digital Enhanced Cordless Telecommunications (DECT);Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 1: Portable radio Termination (PT)".

[i.26] ETSI EN 300 474-2: "Digital Enhanced Cordless Telecommunications (DECT);Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 2: Fixed radio Termination (FT)".

[i.27] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 102 527-5 [15], TS 102 527-3 [14], TS 102 527-1 [13], EN 300 444 [12] and the following apply:

GAP (PP, FP, device or equipment): PP, FP or any of them compliant with EN 300 444 [12]

Golden device: ideal example of a device used as reference device for compliance testing and against which later devices are tested and judged

NG DECT Part 1 Golden Device: golden device, such as the one administered by the DECT Forum, used for compliance testing of NG DECT Part 1 [13] equipment

NG DECT Part 1 (PP, FP, device or equipment), also shortened as Part 1 (PP, FP, device or equipment): PP, FP or any of them compliant with TS 102 527-1 [13].

NG DECT Part 3 (PP, FP, device or equipment), also shortened as Part 3 (PP, FP, device or equipment): PP, FP or any of them compliant with TS 102 527-3 [14].

NG DECT Part 5 (PP, FP, device or equipment), also shortened as Part 5 (PP, FP, device or equipment): PP, FP or any of them compliant with TS 102 527-5 [15].

Off-hook CLIP: ability of a network to send CLIP information for a waiting call (also known as "CLIP on call waiting" or "CLIP phase II")

3.2 Symbols

For the purposes of the present document, the following symbols apply:

M	mandatory to support (provision mandatory, process mandatory)
O	optional to support (provision optional, process mandatory)
I	out-of-scope (provision optional, process optional) not subject for testing
C	conditional to support (process mandatory)

N/A not applicable (in the given context the present document makes it impossible to use this capability)

Provision mandatory, process mandatory means that the indicated feature service or procedure is to be implemented as described in the present document, and may be subject to testing.

Provision optional, process mandatory means that the indicated feature, service or procedure may be implemented, and if implemented, the feature, service or procedure is to be implemented as described in the present document, and may be subject to testing.

NOTE: The notation used is based on the notation proposed in ISO/IEC 9646-7 [i.27].

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

BTPC	Base manual Transmit Power Control
CC	Call Control
CFB	Call Forwarding on Busy subscriber
CFNA	Call Forwarding on No Answer
CFU	Call Forwarding Unconditional
CI	Common Interface
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
CNIP	Calling Name Identification Presentation
CW	Call Waiting
DCIBS	Double Call with In-Band Signalling
DECT	Digital Enhanced Cordless Telecommunications
DLC	Data Link Control
DNS	Domain Name System
DTAM	Digital Telephone Answering Machine
DTMF	Dual Tone Multi-Frequency
FP	Fixed Part
FT	Fixed radio Termination
GAP	Generic Access Profile
HTTP	HyperText Transfer Protocol
IE	Information Element
IUT	Implementation Under Test
IWU	InterWorking Unit
IXIT	Implementation eXtra Information for Testing
LAN	Local Area Network
LiA	List Access
MAC	Medium Access Control
MD	Manufacturer Defined
MM	Mobility Management
MMI	Man and Machine Interface
NA	Not Applicable
NB	Narrow Band
NDT	Network Delay Type
NEM	No Emission Mode
NG	New Generation
NG DECT	New Generation DECT
NWK	NetWorK
Ph A	Phone A
Ph B	Phone B
Ph C	Phone C
PHL	PHysical Layer
PIN	Personal Identification Number
PP	Portable Part
PT	Portable radio Termination
PTS	Profile Test Specification
RSSI	Received Signal Strength Indication

SMS-C	SMS Centre
TCL	Test Case Library
TS	Test System
VoIP	Voice over IP
WAN	Wide Area Network
WB	WideBand

4 Test method

The test method used to test the NG DECT Part 5 devices is the same as for NG DECT Part 3 devices (see TS 102 841 [16], clause 4).

4.1 Test platform

4.1.1 PP test platform

The PP test platform outlined in clause 4.1.1 of TS 102 841 [16] applies to NG DECT Part 5 devices with the following modifications.

4.1.1.1 List content for tests

4.1.1.1.1 List of Supported Lists

The List of Supported Lists outlined in clause 4.1.1.1.1 of TS 102 841 [16] also applies.

4.1.1.1.2 Missed Calls List

The Missed Calls List outlined in clause 4.1.1.1.2 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.1.3 Outgoing Calls List

The Outgoing Calls List outlined in clause 4.1.1.1.3 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.1.4 Incoming Accepted Calls List

The Incoming Accepted Calls List outlined in clause 4.1.1.1.4 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.1.5 All Calls List

Table 4 shows the All Calls List. The total number of entries in the list is 30.

'Unread' and 'Nb of calls' are only relevant for missed calls and for such calls bear the same value as in the Missed calls list.

Table 4: All Calls List test content

Call Type	Number	Name	Date and time	Line name	Line id	Unread	Nb of calls
Missed	497312456897	JENDREZEJZAK	09/09/09 06:45:00	Provider 1	0, 0	1	2
Outgoing	008989945270	UWE	08/09/09 13:13:13	Provider 1	0, 0		
Accepted	02298951214	J.LAGADEC	07/09/09 12:12:12	Provider 1	0, 0		
Outgoing	0145567897		07/09/09 09:09:09	Provider 1	0, 0		
Missed	0145567897		06/09/09 18:48:00	Provider 1	0, 0	1	3
Accepted	0321259514	LE BIHAN	06/09/09 18:36:18	Provider 2	0, 1		
Missed	00441324778824	C.Alexander	06/09/09 15:36:36	Provider 1	0, 0	0	1
Missed	0321259514	LE BIHAN	06/09/09 15:36:00	Provider 2	0, 1	1	1
Missed	0296301005		06/09/09 12:35:00	Provider 1	0, 0	0	1
Outgoing	0675000321	WOJCIECHOSKI	06/09/09 08:33:33	Provider 1	0, 0		
Accepted	0308980764		06/09/09 08:24:24	Provider 1	0, 0		
Outgoing	0612345678	FENJIRO	06/09/09 08:22:22	Provider 3	0, 2		
Accepted	0581321185	K.BORDONADO	06/09/09 08:16:16	Provider 1	0, 0		
Accepted	00441324778824	C.Alexander	06/09/09 08:16:08	Provider 1	0, 0		
Outgoing	0490413002	FENJIRO	06/09/09 08:12:12	Provider 3	0, 2		
Outgoing	00550123456789	G. DEL PIETRO	03/09/09 07:07:07	Provider 1	0, 0		
Missed	008989945270	M.UWE	02/09/09 11:17:00	Provider 3	0, 2	0	1
Accepted	00550123456789	G. DEL PIETRO	02/09/09 09:18:09	Provider 3	0, 2		
Accepted	0296301005		01/09/09 20:40:20	Provider 1	0, 0		
Missed	0177476923	C.FENRIJO	01/09/09 14:08:00	Provider 1	0, 0	0	1
Outgoing	4526300099446770	B.ZIMMERMANN	31/08/09 23:23:23	Provider 1	0, 0		
Outgoing	00449876543210	C.ALEXANDER	31/08/09 16:16:16	Provider 3	0, 2		
Accepted	00449876543210	C.ALEXANDER	31/08/09 12:24:12	Provider 3	0, 2		
Missed	4526300099446770	B.ZIMMERMANN	30/08/09 18:50:00	Provider 3	0, 2	0	1
Outgoing	0296301005		28/08/09 17:17:17	Provider 1	0, 0		
Outgoing	02298951214	LAGADEC	27/08/09 18:18:18	Provider 1	0, 0		
Accepted	0425960406	D.LE BRAZ	25/08/09 18:36:18	Provider 2	0, 1		
Missed	0675000209	R.ALOUSSI	22/08/09 12:00:00	Provider 1	0, 0	0	1
Accepted	0675000321	WOJCIECHOSKI	22/08/09 11:22:11	Provider 1	0, 0		
Missed	0247413706	VAN DER VYNC	20/08/09 18:15:00	Provider 2	0, 1	0	1

Properties

- For all fields, editable=0.
- For Number, Line name, and Line id fields: PIN protected = 0.

4.1.1.1.6 Contact List

Table 5 shows the Contact List used for tests. The total number of entries in the list used for most tests is 10.

As shown in Table 5, the total number of entries used for some tests is 25 (10 entries + additional contact set 1 with 15 additional entries)

Table 5: Contact List test content

Name	First name	Contact number1	Contact number2 (note 1)	Associated Melody (note 2)	Line id
ALEXANDER	Christian	(fixed) 00441324778824	(work) 00449876543210	1	3, 2
ALEXANDER	Christina	(fixed) 00441324778812		2	3, 2
ALOUSSI	RAMIN	(fixed) 0156891247	(mobile) 0675000209	3	3, 0
BORDONADO	Karlità	(work) 0581321185		4	3, 0
DEL PIETRO	David	(fixed) 00550123456789		5	3, 0
FENJIRO	Carlos	(work) 0490413002	(mobile) 0612345678	6	3, 2
LAGADEC	Jérôme	(work) 02298951214		7	3, 0
UWE	MARCUS	(work) 008989945270	(fixed) 00491603794505	1	3, 0
WALKER	BARCLAY	(mobile) 06123123		2	3, 2
WOJCIECHOSKI		(mobile) 0675000321		3	3, 1
Additional contact set 1 (note 3)					
SURÁNY	Horváth	(*work*)08093316433	-	4	3, 1
WEATHERBURN	Ashton	(*fixed*)5461106	-	3	3, 0
ALEXEYEVA	Vanessa	(*mobile*)2446544	(*work*)157615665	8	3, 2
MAJEWSKI	Szczęsny	(*work*)5506308	-	6	3, 0
VAN ZUIDAM	Melchior	(*mobile*)6786088	(*fixed*)48716156119	5	3, 2
YAGAWA	Yumi	(*mobile*)6129828	(*fixed*)14179664	7	3, 3
LUKIĆ	Frano	(*work*)4378400	(*mobile*)7960069	4	3, 1
LAISNÉ	-	(*fixed*)5282472	(*work*)351671601	3	3, 6
HAUKÅS	Ingfryd	(*fixed*)040916155	(*work*)6667465	1	3, 2
GUAJARDO	Joscio Verdugo	(*work*)5119225	-	1	3, 5
NNAMUTAEZINWA	Fumnanya	(*fixed*)051108463	(*work*)15117161781	8	3, 7
BARIŠIĆ	Dinka	(*work*)3342267	(*fixed*)415879)	2	3, 5
-	Kunihide	(*mobile*)6269134	-	5	3, 4
KALLIOMÄKI	Jasmin	(*work*)6876433	(*fixed*)61871617	4	3, 1
BJÖRKLUND	Alexsandra	(*mobile*)6859168	-	1	3, 0

NOTE 1: 'Contact number' is a multiple instance field. The test equipment shall support two instances maximum for this field. Contact number2 entry field instance shall be sent by the test equipment if and only if it is defined and the PP requested it in the request. The sending of this instance does not depend on whether the manufacturer has declared the support of several 'Contact number' fields in the Contact List on PT side (PT_IXIT_1).

NOTE 2: 'Associated melody' field is optional on PP side, anyhow it should be handled in each entry when received in data packet.

NOTE 3: Additional contact set 1 is used by test cases requiring 25 contacts and is only used if explicitly referred to in the test case.

Table 5a: Special characters used in the contacts

Used character	Code point	UTF-8 encoding
Á	U+00c1	c381H
á	U+00e1	c3a1H
ę	U+0119	c499H
Ć	U+0106	c486H
É	U+00c9	c389H
Å	U+00c5	c385H
Š	U+0160	c5a0H
Ä	U+00c4	c384H
Ö	U+00d6	c396H

Table 5a shows the special characters used in the contacts.

Properties

- For all fields, editable = 1.
- For Associated Melody, and Line id fields: PIN protected = 0.

4.1.1.1.7 Internal Names List

The Internal Names List outlined in clause 4.1.1.1.7 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.1.8 DECT System Settings List

Table 7 shows the DECT system settings test list content.

NOTE: Compared with Table 7 in TS 102 841 [16], the 'FP power level' setting is added.

Table 7: DECT system settings test list content

Entry identifier	Settings	Editable	PIN protected	Value
1	Current PIN code	1	0	FFH, FFH, 12H, 34H
	Clock master	1	0	30H (FP)
	Base reset	1	1	30H (No)
	FP IP address / type	1	0	DHCP=0, Static=1
	FP IP address / value	1	0	IPv4/6=0, 'C0A8D40C'H (192.168.212.12)
	FP IP address / subnet mask	1	0	IPv4/6=0, 'FFFFFF00'H (255.255.255.0)
	FP IP address / gateway	1	0	IPv4/6=0, 'C0A8D401'H (192.168.212.1)
	FP IP address / DNS server	1	0	IPv4/6=0, 'C0A8D401'H (192.168.212.1) (see note)
	FP version / Firmware version	0	0	"F1.2C8"
	FP version / Eeprom version	0	0	"E1.5C6"
	FP version / Hardware version	0	0	"H1.4A2"
	Emission mode	1	0	NEM=0 (deactivated)
	New PIN code	1	1	FFH, FFH, 12H, 34H
	FP power level	1	0	BTPC=0 ('Normal power level')
NOTE: 'FP IP address / DNS server' is a multiple instance field. The test equipment shall support only a single instance for this field.				

4.1.1.1.9 Line Settings List

The Line Settings List outlined in clause 4.1.1.1.9 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.1.10 All Incoming Calls List

The All Incoming Calls List outlined in clause 4.1.1.1.10 of TS 102 841 [16] also applies to NG DECT Part 5 devices.

4.1.1.2 List Content for SMS Tests

4.1.1.2.1 Incoming SMS List

Table 9a shows the incoming SMS list.

Table 9a: Incoming SMS List test content

Number	Name	Date and Time	Read Status	SMS Service ID	SMS Size	SMS Content
497312456897	JENDREZEJZAK	5/12/12 10:18:01	1	1	2	ja
0145567897	FAGIN	5/12/12 10:21:12	1	1	20	My days are numbered
00441324778824	C.Alexander	5/12/12 10:23:23	1	1	3	yes
0321259514	LE BIHAN	5/12/12 10:24:34	1	1	16	Promenades d'été
0296301005	Raskolnikov	5/12/12 10:29:45	1	1	10	can it be?
4526300099446770	B.ZIMMERMANN	5/12/12 10:32:56	1	1	13	The answer is
0177476923	C.FENRIJO	5/12/12 10:35:07	1	1	14	TORRE DO TOMEO
4526300099446770	B.ZIMMERMANN	5/12/12 10:37:18	1	1	19	Blowing in the wind
0675000209	R.ALOUSSI	5/12/12 10:38:29	1	1	20	His no is 0296301005
0247413706	VAN DER VYNC	5/12/12 10:42:10	1	1	8	afscheid

4.1.1.2.2 Sent SMS List

Table 9b shows the sent SMS List test content.

Table 9b: Sent SMS List test content

Number	Name	Date and Time	SMS Service ID	Network Side SMS Encoding	SMS Size	SMS Content
0675000321	WOJCIECHOSKI	5/12/12 10:21:42	1	Unknown	8	WITAJ
00441324778824	C.Alexander	5/12/12 10:23:53	1	Unknown	3	yes
0321259514	LE BIHAN	5/12/12 10:24:54	1	Unknown	8	D'accord
0296301005	Raskolnikov	5/12/12 10:30:45	1	Unknown	7	perhaps
06123123	Barclay	5/12/12 10:33:56	1	Unknown	40	Just had a text from Bob with the answer
0177476923	C.FENRIJO	5/12/12 10:36:07	1	Unknown	2	ok
4526300099446770	B.ZIMMERMANN	5/12/12 10:38:18	1	Unknown	10	Thanks Bob
0675000209	R.ALOUSSI	5/12/12 10:39:29	1	Unknown	6	Thanks

4.1.1.2.3 Outgoing SMS List

Table 9c shows the Outgoing SMS List test content.

Table 9c: Outgoing SMS List test content

Number	Name	Date and Time	SMS Service ID	Network Side SMS Encoding	SMS Size	SMS Content
0321259514	LE BIHAN	5/12/12 12:19:51	1	Unknown	8	One
0296301005	Raskolnikov	5/12/12 12:20:42	1	Unknown	7	Two
0675000209	R.ALOUSSI	5/12/12 12:21:23	1	Unknown	6	Three

4.1.1.2.4 Draft SMS List

Table 9d shows the Draft SMS List test content.

Table 9d: Draft SMS List test content

Number	Name	Date and Time	SMS Service ID	Sending request	Network Side SMS Encoding	SMS Size	SMS Content
0296301005	Raskolnikov	5/12/12 12:20:42	1	1	Unknown	21	How is the inspector?

4.1.1.2.5 SMS Settings List

Table 9e shows the SMS Settings List test content.

Table 9e: SMS Settings List test content

SMS service id	1	2
Line id	0	1
Enable SMS	No	Yes
Max SMS size	140	1024
SMSC send server	0123456789	0987654321
SMSC receive server	0123456788	0987654321
SMS delivery report	30H	31H
SMS validity report	167	255
Allowed SMS character encodings	UTF-8	GSM/7-bit

4.1.1.3 List Content for DTAM and Call Screening Tests

4.1.1.3.1 DTAM Settings List

Table 9f shows the DTAM Settings List test content. The underlying test system is configured as a system that has 3 Lines and 2 DTAMs.

DTAM2 supports line specific information for all fields (and subfields thereof).

Table 9f: DTAM Settings List test content

DTAM Id (note 1)	Line id	DTAM full identifier	DTAM Number	Local DTAM current PIN code	DTAM activation and timeout	DTAM web link	Welcome message parameters	Screening parameters (note 2)	Local DTAM new PIN code
DTAM1	(0,0)	Visual, local, 1	∅	'0123'	Activated, 15 s	dtam1.example.com	Index 2	Activated, 15 s, screening mode = 30H (single), nb of screening handsets=2, bitmap=83H	'0123'
DTAM2	(0,1)	Voice, remote, 2	'456'		Activated, 15 s	dtam2.example.com	Index 1	Left unspecified	NA
DTAM2	(0,2)	Voice, remote, 2	'456'		Deactivated, 20 s	dtam2.example.com	Index 1	Left unspecified	NA
NOTE 1: This id is for use within the current document and is not present in the DTAM Settings List itself. NOTE 2: The test systemsupports 2 handsets.									

4.1.1.3.2 DTAM Incoming Messages List

Table 9g shows the DTAM Incoming Messages List test content.

NOTE: A DTAM Incoming Messages List is only used by a 'Visual' DTAM.

Three entries are defined.

Table 9g: DTAM Settings List test content

DTAM full id	Number	Name	Date and time (H,M,S,TZ,Y,M,D)	Unread	Line name	Line id	Time duration (H,M,S)
Visual, local, 1	'0131789654'	'Adam Smith'	20,15,45,00,13,01,30	1	Provider 1	(0,0)	00,03,10
Visual, local, 1	'0111987654'	'Fred Smith'	21,16,46,00;13;02,01	1	Provider 1	(0,0)	00,02,30
Visual, local, 1	'0222987654'	'Aymeric'	21,18,50,00,13,02,02	1	Provider 1	(0,0)	00,01,55

4.1.1.3.3 DTAM Welcome Messages List

Table 9h shows the DTAM Welcome Messages List test content.

Table 9h: DTAM Welcome Messages List test content

DTAM id (note 1)	DTAM full identifier	Position index	Name	Time duration	Comment
DTAM1	Visual, local, 1	1	Wel Mess 1	10 s	Not used by any line
DTAM1	Visual, local, 1	2	Home	15 s	Used by line 0
DTAM2	Voice-oriented, remote, 2	1	Work	20 s	Used by lines 1 and 2
DTAM2	Voice-oriented, remote, 2	2		0 s	Empty position
NOTE: This id is for use within the current document and is not present in the Welcome Message List itself.					

4.1.2 FP test platform

The FP test platform outlined in clause 4.1.2 of TS 102 841 [16] also applies to NG DECT Part 5 devices. This also applies to the list contents for test.

4.1.3 NG DECT Part 1 backward compatibility test platform

It is crucial to ensure interoperability between NG DECT Part 5 devices and NG DECT Part 1 devices. In order to gain maximum interoperability NG DECT Part 1 devices a test against Golden Devices (FT and PT) is absolutely necessary.

To keep the required effort as low as possible, some basic tests such as incoming call WB, outgoing call WB and service change WB->NB have been added.

The diagram for 'Test platform for NG DECT Part 1 backwards compatibility tests' in TS 102 841 [16] applies.

The following devices are needed:

Golden devices:

One Golden NG DECT Part 1 handset (WB-PP) (see note)

Two Golden NG DECT Part 1 base stations (WB-FP)

Reference devices:

One corded wideband SIP phone (SIP-WB-PH)

One corded narrowband SIP phone (SIP-NB-PH)

SIP server.

Device under test:

Wideband (NG DECT Part 5) handset (DUT-PP)

or

Wideband (NG DECT Part 5) base station (DUT-FP).

NOTE: This unique golden NG DECT Part 1 handset supports encryption in full-slot and long-slot mode in accordance with NG DECT Part 1 standard.

4.2 Hypothesis

Protocol layers tested

Network and application features are only tested. DLC, MAC, and PHY procedures used by new DECT generation standard are supposed to be tested when testing network features.

Speech services tested

The device under test is required to support only mandatory speech services. Optional codecs are out of the scope of the present document.

Length of a NWK layer message

The test equipment shall not send NWK layer messages longer than 63 bytes (see EN 300 444 [12], clause 6.9.3). In the other direction, the test equipment shall be capable of receiving and processing NWK layer messages of at least 63 octets long. A received NWK layer message longer than 63 bytes shall be discarded.

4.3 Test groups

4.3.1 Network features

See TS 102 527-5 [15], clauses 5.2, 6.4 and 6.10.

4.3.2 Application features

See TS 102 527-5 [15], clauses 5.7, 6.9 and 6.13.

5 Test Cases (TCs)

Each test case is allocated directly under a defined TC.

5.1 TC definition conventions

The TCs are defined following particular rules as shown in Table 10.

Table 10: TC definition rules

TC Id according to the TC naming conventions	Test case objective
Main test purpose:	Optional detailed description of test case objective for complex test cases
Reference:	The reference should contain the references of the subject to be validated by the actual TC (specification reference, clause, paragraph, flow chart number, etc.)
Initial condition:	The condition defines in which initial state the IUT has to be to apply the actual TC
Time sequence:	The time sequence is the description of the test case, including messages exchanged between IUT and tester, and user actions. In other words, it defines the sequence of stimuli experienced by the IUT and its expected response(s)
Pass criteria:	Definition of the verifications that the tester has to perform on the responses expected from the IUT in order to ascertain conformance of the latter with the base specification
Comments: (optional)	Additional information or comments on test case content
Display_n	Optional list of tester display messages description

The device under test and the test equipment shall meet the features and procedures specified in "New Generation DECT; Part 5: Additional feature set nr.1 for extended wideband speech" (see TS 102 527-5 [15]). Nevertheless, only checked protocol elements are specifically described in the test case. Even if a NG PART5 requirement is not specified in a stimulus or a pass criteria test step, this does not mean it should not be implemented or tested. This simply means that this requirement is out of scope of this test case and will be tested elsewhere. As a result, the "New Generation DECT; Part 3: Extended wideband speech" (TS 102 527-3 [14]), the "New Generation DECT; Part 1: Wideband speech" (TS 102 527-1 [13]) and the delta to the "Generic Access Profile" (EN 300 444 [12]) features will be tested with the NG Part 5 requirements implemented.

TC Id

The TC Id is a unique identifier; it shall be specified according to the TC naming conventions defined in the clause below.

Reference

When a flowchart number is given in reference, this flowchart is only a recommendation to implement the test case. As a result, the TS has to be flexible enough to deal with several IUT implementations (dynamic behaviour).

Initial condition

It is stipulated when a test necessitates another registered PP (NG PP or legacy GAP PP).

By default (i.e. when no other PP is specified), the TS_1 and the IUT are involved together in the CC instance whose CC control state is stipulated in the initial condition.

A test case reference is given when this TC has to be run to reach the initial condition (for example: "Run TC_FT_NG1.N.16_BV_1802"). That means that this test case shall be run before the current one.

Pass criteria

- Criterion for checking "end-to-end U-plane connection": this is an operation to detect the state of the U−plane connection. The acoustical path will be checked in both directions. When testing a PP, Test system could perform an audio loopback and introduce a delay (e.g. 1s) to create an echo. When testing a FP, Test system could use a tone generation. In both cases, Test system could also use a handset receiver plugged in the equipment.

- Some parameters used in TCs can be allocated by the IUT (e.g. call id, terminal identity number, session id, line id, etc.) or be network dependant (line type information for each line). As a consequence a generic notation is used in the TC description (respectively "call id A", "IA5 coding of terminal identity number in decimal of PP1", session id n, line 0, lt0, etc.).

5.1.1 Test equipment implementation requirements

This clause specifies the general requirements to be implemented by the test equipment. The requirements listed below can be valid either for several features on one side, or for one feature on both sides, PP and FP side. Specific requirements for a single feature are given in the related clause describing the sub tests suite for this feature.

Order of information elements in NWK layer messages

- The IUT shall send Information elements in the correct order within a NWK layer message (as defined in EN 300 175-5 [5], clause 7.5.1 "Coding rules"). This is valid for PT and FT sides.

NOTE 1: If this requirement is not respected, some test cases may fail on PT and FT side (as the test equipment will expect the correct order).

Segmentation of information in CC procedures

- The IUT shall not use segmentation of NWK messages (defined in EN 300 175-5 [5], clause 9.9 "Segmentation of information in CC procedures").

NOTE 2: If this requirement is not respected, some test cases may fail on PT and FT side (as the test equipment will expect only one segment).

NOTE 3: "Segmentation of information in CC procedures" is not mandatory for NG DECT Part 3 devices. So such implementations may face interoperability problems in case the peer party does not support the same mechanism.

Basic service used by the test equipment when initiating a call (external, internal, or list access service call)

- Within PT and FT test cases the test equipment shall behave as follows:

  Rule 1: When behaving as a NG DECT device, the test equipment shall use by default the "Wideband speech default setup attributes" basic service in IE <<BASIC-SERVICE>> at call setup (as required in TS 102 527-1 [13], TS 102 527-3 [14] and TS 102 527-5 [15]). This is the default behaviour for all test cases and especially in those where "TS_x is a NG PP" is mentioned. This basic service shall also be used even in the test cases where outgoing calls to narrow band phones are performed.

  Rule 2: When behaving as a GAP device the test equipment shall use by default the "Basic speech default setup attributes" basic service in IE <<BASIC-SERVICE>> at call setup (as required in EN 300 444 [12]). This is the default behaviour for all test cases where "TS_x is a GAP PP" is mentioned.

NOTE 4: The "automatic" rule 1 applies because in all the test cases of the current test specification, the test equipment initiates calls only in front of NG DECT Part 5 IUTs (PP or FP) but not in front of GAP IUTs. As a consequence the test equipment does not need to check the NG DECT capabilities of the remote party (IUT) to define the basic service to be used.

NOTE 5: When receiving a call on the test equipment (internal calls for example), it is the IUT that will use the correct basic service depending if the test equipment behaves as a NG DECT or GAP device.

Line type information

- When testing a PP, by default if it is not specified, the simulated lines are full VoIP lines and so the 'Line type information' field in <<CALL-INFORMATION>> IE shall be coded as follows:
  - The 'Network delay type' ('**NDT**') = '1'B, indicating that the line is a 'significant delay' line.
  - The 'Second call type' ('**SCT**') = '0'B, indicating that second calls are handled with 'common parallel call' procedures.
- When testing a FP, the 'Line type information' field in <<CALL-INFORMATION>> is line dependent for the 'Network delay type' ('**NDT**') information. The 'Second call type' ('**SCT**') information shall be coded according to the manufacturer's declarations for Line 0 and Line 1 (see also clause 5.1.1 in TS 102 841 [16]).

Internal call Initiation

- When initiating an internal call, a PP under test could access the Internal Names List. The test equipment shall be ready to accept both methods: with and without access to the Internal Names List.

External call Initiation

- When initiating an external call (either first or parallel), a PP under test could access to the Line Settings List, so that the user can select a line of this call.
  This access to the Line Settings List might occur e.g. after subscription/location registration or triggered by a {FACILITY} message with a list change notification for the Line Settings List or triggered by a user interaction fully independent from a call or immediately before placing the external outgoing call.
  The test equipment shall be ready to accept both methods: with and without access to the Line Settings List.

List access service tests cases

- In order to make the NG1.N.16 List access service test cases less wordy, the stimulus and pass criteria make reference only to the list access commands sent or expected. However, the tester and IUT shall comply with NG Part 3 and NG Part 5 requirements (see TS 102 527-5 [15], clause 7.4.10.1). As a consequence, when receiving commands in pass criteria, each command shall be received in a {IWU-Info} message with information element <<IWU to IWU>> using the protocol discriminator '03'H. Respectively, when sending commands in stimulus, the tester shall use the same transport message.

IUT not registered in initial condition

When a test starts with the initial condition "IUT not registered", the test equipment shall send an {ACCESS-RIGHTS-TERMINATE-REQUEST} message to the IUT just before the first stimulus in order to ensure that the IUT is de-registered at the beginning of the TC. The test equipment shall be prepared to receive optionally an ACCESS-RIGHTS-TERMINATE-ACCEPT (if an IUT was previously registered).

Support of release collision scenario by the equipment

The test equipment shall support the release collision procedure as defined in clause 8.7.2.1 of EN 300 444 (GAP) [12]. More specifically for test cases such as TC_FT_NG1.N.16_BV_2109 (see TS 102 841 [16]), where the digits dialled by the test requipment do not correspond to any existing remote party, the IUT and the TS may release the link simultaneously via CC-RELEASE.

5.2 TC naming conventions

Each feature to be tested corresponds to a group of test cases identified by its standard feature number.

The identifier of the TC is built according to Table 11.

Table 11: TC naming convention

TC_<rt>_<fn>_<tt>_<ppnn>		
<rt> = type of radio termination	FT PT	Fixed radio Termination Portable radio Termination
<fn> = feature number	NG1.N.x GAP.N.x NG1.A.x GAP.A.x	New generation Network feature GAP Network feature New generation Application feature GAP Application feature
<tt> = Type of testing	BV GC WC	Valid Behaviour Tests GAP backward compatibility Tests (see note 1) NG DECT Part 1 backward compatibility Tests (note 2)
<pp = procedure number	(1 to 99)	Procedure Number (see note 3)
nn> = sequential number	(01 to 99)	Test Purpose Number
NOTE 1: GAP backward compatibility tests concern only the FP. These tests check FP specific behaviours for NG features in front of GAP PPs. NOTE 2: These tests are to ensure interoperability in front of legacy NG DECT Part 1 "Wideband speech" devices. NOTE 3: The procedure number refers to the number given to each procedure in Annex B. For example the procedure "NG1.N.1_3 Codec Negotiation during call establishment" is the procedure number '3' of NG1.N.1 Codec Negotiation feature. If several procedures are involved in the TS, the procedure number refers to the procedure mainly tested.		

NOTE: In order to limit the number of tests, invalid behaviour use cases are not tested.

5.3 Portable Part TC purposes

5.3.1 List of New Generation DECT Part 1 PT tests cases

Table 12 gives the list of NG DECT Part 1 test cases related to the DECT "Wideband speech" (TS 102 527-1 [13]) features and their status for a Part 5 PT. The definition of these test cases can be found in TS 102 841 [16].

These test cases shall be implemented with the NG DECT Part 5 requirements (see clause 5.1).

Table 12: NG DECT Part 1 PT Test Case Index

NG DECT Part 1 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	NG1.N.1	**Codec Negotiation**	**M**
TC_PT_NG1.N.1	TC_PT_NG1.N.1_BV_101	NG DECT Part 1 capability during subscription registration	M
	TC_PT_NG1.N.1_BV_102	NG DECT Part 1 capability during location registration	M
	TC_PT_NG1.N.1_BV_201	Basic service wideband speech	M
	TC_PT_NG1.N.1_BV_301	Outgoing call, codec chosen in {CC-SETUP-ACK} without slot type modification	M
	TC_PT_NG1.N.1_BV_303	Outgoing call, codec chosen in {CC-CALL-PROC} without slot type modification	M
	TC_PT_NG1.N.1_BV_308	Outgoing call, codec chosen in {CC-CONNECT} message in state T-01 without slot type modification	M
	TC_PT_NG1.N.1_BV_309	Outgoing call, codec chosen in {CC-SETUP-ACK} with slot type modification	M
	TC_PT_NG1.N.1_BV_311	Outgoing call, codec chosen in {CC-CALL-PROC} message with slot type modification	M
	TC_PT_NG1.N.1_BV_316	Outgoing call, codec chosen in {CC-CONNECT} in state T-01 with slot type modification	M
	TC_PT_NG1.N.1_BV_317	Outgoing call, fall back to a mandatory codec when slot type modification fails	M
	TC_PT_NG1.N.1_BV_321	Incoming call G.722, full paging	M
	TC_PT_NG1.N.1_WC_101	Outgoing call Wideband at NG DECT Part 1 Golden Device FT (Golden Device A)	M
	TC_PT_NG1.N.1_WC_102	Outgoing call Wideband at NG DECT Part 1 Golden Device FT (Golden Device B)	M
	TC_PT_NG1.N.1_WC_103	Incoming call Wideband at NG DECT Part 1 Golden Device FT (Golden Device A)	M
	TC_PT_NG1.N.1_WC_104	Incoming call Wideband at NG DECT Part 1 Golden Device FT (Golden Device B)	M
	TC_PT_NG1.N.1_WC_105	Service change at NG DECT Part 1 Golden Device FT (Golden Device A)	M
	TC_PT_NG1.N.1_WC_106	Service change at NG DECT Part 1 Golden Device FT (Golden Device B)	M
	NG1.N.2	**Codec Switching**	**M**
TC_PT_NG1.N.2	TC_PT_NG1.N.2_BV_101	Codec switching from G.722 to G.726	M
	TC_PT_NG1.N.2_BV_102	Codec switching from G.726 to G.722	M
	GAP.N.30	**Calling Line Identification Presentation (CLIP)**	**M**
TC_PT_GAP.N.30	TC_PT_GAP.N.30_BV_01	Incoming call with calling party number in {CC-SETUP}	M
	TC_PT_GAP.N.30_BV_02	Incoming call with calling party number in {CC-INFO}	M

5.3.2 List of New Generation DECT Part 3 PT tests cases

Table 13 gives the list of NG DECT Part 3 test cases related to the DECT "Extended Wideband Speech Services" (TS 102 527-3 [14]) features and their status for a Part 5 PT. The definition of these test cases can be found in TS 102 841 [16].

These test cases shall be implemented with the NG DECT Part 5 requirements (see clause 5.1).

Table 13: NG DECT Part 3 PT Test Case Index

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	NG1.N.1	**Codec negotiation**	M
TC_PT_NG1.N.1	TC_PT_NG1.N.1_BV_103	NG DECT Part 3 capability during subscription registration	M
	TC_PT_NG1.N.1_BV_104	NG DECT Part 3 capability during location registration	M
	NG1.N.3	**Missed call notification**	M
TC_PT_NG1.N.3	TC_PT_NG1.N.3_BV_201	Missed call notification, activation	M
	TC_PT_NG1.N.3_BV_202	Missed call notification, deactivation	M
	TC_PT_NG1.N.3_BV_203	Missed call notification, activation while on active call	M
	NG1.N.4	**Voice message waiting notification**	M
TC_PT_NG1.N.4	TC_PT_NG1.N.4_BV_201	Voice message waiting notification, activation	M
	TC_PT_NG1.N.4_BV_202	Voice message waiting notification, deactivation	M
	NG1.N.5	**Date and Time synchronization**	M
TC_PT_NG1.N.5	TC_PT_NG1.N.5_BV_101	FT initiated Date and Time synchronization	M
	TC_PT_NG1.N.5_BV_102	PT initiated Date and Time synchronization	O
	NG1.N.6	**Parallel Calls**	M
TC_PT_NG1.N.6	TC_PT_NG1.N.6_BV_401	Codec change for parallel calls from G.722 to G.726	M
	TC_PT_NG1.N.6_BV_402	Codec change for parallel calls from G.726 to G.722	M
	TC_PT_NG1.N.6_BV_501	Sending negative acknowledgement - call toggle unsuccessful	M
	TC_PT_NG1.N.6_BV_601	Busy line notification	M
	NG1.N.7	**Common parallel call procedures (external or internal)**	M
TC_PT_NG1.N.7	TC_PT_NG1.N.7_BV_102	Outgoing parallel call initiation (external)	M
	TC_PT_NG1.N.7_BV_103	Outgoing parallel call initiation (internal)	M
	TC_PT_NG1.N.7_BV_201	Call waiting indication (external) - CLIP on call waiting indication - End of call waiting indication	M
	TC_PT_NG1.N.7_BV_202	Call waiting indication (internal) - CLIP on call waiting indication - End of call waiting indication	M
	TC_PT_NG1.N.7_BV_301	Call toggle (external)	M
	TC_PT_NG1.N.7_BV_302	Call toggle (internal)	M
	TC_PT_NG1.N.7_BV_401	Call release and call release rejection	M
	TC_PT_NG1.N.7_BV_601	Call waiting acceptance (from PP to FP) (external)	M
	TC_PT_NG1.N.7_BV_602	Call waiting acceptance (from PP to FP) (internal)	M
	TC_PT_NG1.N.7_BV_701	Active call release with replacement (from PP to FP) - call waiting (external)	O
	TC_PT_NG1.N.7_BV_702	Active call release with replacement (from PP to FP) - call on-hold (external)	O
	TC_PT_NG1.N.7_BV_801	Call waiting rejection (from PP to FP) (external)	M
	TC_PT_NG1.N.7_BV_901	Putting a call on-hold - Resuming a call put on-hold	O
	TC_PT_NG1.N.7_BV_1201	CNIP on call waiting indication (external)	M
	TC_PT_NG1.N.7_BV_1202	CNIP on call waiting indication (internal)	M
	NG1.N.8	**Call transfer (external or internal)**	M

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
TC_PT_NG1.N.8	TC_PT_NG1.N.8_BV_101	Call transfer (external) - announced	M
	TC_PT_NG1.N.8_BV_102	Call transfer (external) - unannounced	M
	TC_PT_NG1.N.8_BV_103	Call re-injection to the system (external)	M
	TC_PT_NG1.N.8_BV_104	Remote party CLIP on call transfer (external)	M
	TC_PT_NG1.N.8_BV_105	Remote party CNIP on call transfer (external)	M
	NG1.N.9	**3-party conference with established external and/or internal calls**	M
TC_PT_NG1.N.9	TC_PT_NG1.N.9_BV_101	3-party conference with established external and internal calls - IUT is the initiating party - release from one of the non initiating parties	M
	TC_PT_NG1.N.9_BV_102	3-party conference with established external and internal calls - IUT is not the initiating party	M
	TC_PT_NG1.N.9_BV_103	3-party conference with established external and internal calls - IUT is the initiating party - FT sends negative acknowledgement	M (note 3)
	NG1.N.10	**Intrusion call**	M
TC_PT_NG1.N.10	TC_PT_NG1.N.10_BV_101	Implicit call intrusion into a line in "single call" mode - IUT is the initiating party in front of a non-early {CC-CONNECT} FP	C1301
	TC_PT_NG1.N.10_BV_102	Implicit call intrusion into a line in "single call" mode - IUT is the initiating party in front of an early {CC-CONNECT} FP	C1301
	TC_PT_NG1.N.10_BV_103	Implicit call intrusion into a line in "single call" mode - IUT is the initiating party - FT sends negative acknowledgement	C1301 (note 3)
	TC_PT_NG1.N.10_BV_201	Explicit call intrusion into a line in "single call" mode in front of a non-early {CC-CONNECT} FP	C1301
	TC_PT_NG1.N.10_BV_202	Explicit call intrusion into a line in "single call" mode in front of an early {CC-CONNECT} FP	C1301
	TC_PT_NG1.N.10_BV_203	Explicit handset intrusion - IUT is the initiating party - FT sends negative acknowledgement	C1315 (note 3)
	TC_PT_NG1.N.10_BV_204	Explicit line intrusion - IUT is the initiating party - FT sends negative acknowledgement	C1315 (note 3)
	TC_PT_NG1.N.10_BV_301	Test of the intruded PP - Implicit call intrusion into a line in "single call" mode - IUT is not the initiating party	M
	NG1.N.11	**Call deflection (external or internal)**	O
TC_PT_NG1.N.11	TC_PT_NG1.N.11_BV_101	Call deflection (internal) in multiple lines context	M
	TC_PT_NG1.N.11_BV_201	Call deflection (external) - successful	M
	TC_PT_NG1.N.11_BV_202	Call deflection (external) - unsuccessful	M
	TC_PT_NG1.N.11_BV_203	Call deflection (external) - Call waiting deflection	M
	NG1.N.12	**Line identification**	M

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
TC_PT_NG1.N.12	TC_PT_NG1.N.12_BV_201	Line identification for a first external outgoing call using <<CALL-INFORMATION>> IE (non early CC-CONNECT implementation)	M
	TC_PT_NG1.N.12_BV_202	Line identification for a first external outgoing call using <<CALL-INFORMATION>> IE (early CC-CONNECT implementation)	M
	TC_PT_NG1.N.12_BV_501	FP managed line selection for a first external outgoing call (non early CC-CONNECT implementation)	M
	TC_PT_NG1.N.12_BV_502	FP managed line selection for a first external outgoing call (early CC-CONNECT implementation)	M
	NG1.N.13	**Call identification**	M
TC_PT_NG1.N.13	TC_PT_NG1.N.13_BV_201	Call identifier assignment on outgoing call (FP to PP) - Normal call (non early CC-CONNECT implementation) - Call status indication	M
	TC_PT_NG1.N.13_BV_202	Call identifier assignment on outgoing call (FP to PP) - Normal call (early CC-CONNECT implementation) - Call status indication	M
	TC_PT_NG1.N.13_BV_203	Call identifier assignment on outgoing call (FP to PP) - Internal call - Call status indication	M
	TC_PT_NG1.N.13_BV_301	Call identifier assignment on incoming call (FP to PP) - Normal call setup	M
	NG1.N.14	**Multiple Lines**	M
TC_PT_NG1.N.14	TC_PT_NG1.N.14_BV_301	Incoming external calls on a multiple line system - Accept incoming call on second line and release it - Resume first call	M
	TC_PT_NG1.N.14_BV_305	Outgoing external calls on a multiple line system - Initiate a second outgoing call on second line using PP line selection	M
	TC_PT_NG1.N.14_BV_306	Outgoing external calls on a multiple line system - Initiate a second outgoing call on second line using FP managed line selection	M
	NG1.N.15	**Multiple calls**	M
TC_PT_NG1.N.15	TC_PT_NG1.N.15_BV_201	Incoming external calls on a multiple call line - Accept incoming second call	M
	TC_PT_NG1.N.15_BV_205	Outgoing external calls on a multiple call line - Initiate a second outgoing call on the line using line selection	M
	TC_PT_NG1.N.15_BV_206	Outgoing external calls on a multiple call line - Initiate a second outgoing call on the line using FP managed line selection	M
	TC_PT_NG1.N.15_BV_301	Busy system notification	M
	NG1.N.16	**List access service**	M
TC_PT_NG1.N.16	TC_PT_NG1.N.16_BV_1701	Missed Calls List - Read entries - Initiate an external call	C1316
	TC_PT_NG1.N.16_BV_1702	Missed Calls List - Delete entry	C1316
	TC_PT_NG1.N.16_BV_1703	Missed Calls List - Delete list - Read entries when empty	C1316
	TC_PT_NG1.N.16_BV_1704	Missed Calls List - Transfer number from Missed Calls List to Contact List	C1316
	TC_PT_NG1.N.16_BV_1705	Missed Calls List - Incoming first voice call during existing list access session	C1316
	TC_PT_NG1.N.16_BV_1801	Outgoing Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_1802	Outgoing Calls List - Delete entry	O
	TC_PT_NG1.N.16_BV_1803	Outgoing Calls List - Delete list - Read entries when empty	O
	TC_PT_NG1.N.16_BV_1901	Incoming Accepted Calls List - Read entries - Initiate an external call	C1316
	TC_PT_NG1.N.16_BV_1902	Incoming Accepted Calls List - Delete entry	C1316
	TC_PT_NG1.N.16_BV_1903	Incoming Accepted Calls List - Delete list - Read entries when empty	C1316
	TC_PT_NG1.N.16_BV_1904	Incoming Accepted Calls List - Transfer number from Incoming Accepted Calls List to Contact List	C1316

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	TC_PT_NG1.N.16_BV_2101	Contact List - Read entries - Initiate an external call	I (note 1)
	TC_PT_NG1.N.16_BV_2102	Contact List - Delete entry (note 4)	M
	TC_PT_NG1.N.16_BV_2103	Contact List - Delete list - Read entries when empty (note 4)	M
	TC_PT_NG1.N.16_BV_2104	Contact List - Create entry - Edit entry - Save entry (note 4)	M
	TC_PT_NG1.N.16_BV_2105	Contact List - Create entry - Negative Acknowledgement	M
	TC_PT_NG1.N.16_BV_2106	Contact List - Read entries during external call (note 4)	M
	TC_PT_NG1.N.16_BV_2110	Contact List - Entry with several contact numbers (note 4)	C1309
	TC_PT_NG1.N.16_BV_2201	Internal Names List - Read entries - Initiate an internal call	M
	TC_PT_NG1.N.16_BV_2202	Internal Names List - Delete entry	M
	TC_PT_NG1.N.16_BV_2203	Internal Names List - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_2204	Internal Names List - Call interception - PIN protected - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_2301	All Incoming Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2302	All Incoming Calls List - Delete entry	O
	TC_PT_NG1.N.16_BV_2303	All Incoming Calls List - Delete list - Read entries when empty	O
	TC_PT_NG1.N.16_BV_2401	DECT System Settings List - Read entries	M
	TC_PT_NG1.N.16_BV_2501	Line Settings List - Read entries	M
	TC_PT_NG1.N.16_BV_2601	Virtual Missed Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2602	Virtual Outgoing Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2603	Virtual Incoming Accepted Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2604	Virtual All Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2605	Virtual Contact List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2606	Virtual All Incoming Calls List - Read entries - Initiate an external call	O
	TC_PT_NG1.N.16_BV_2701	DECT System Settings List - Current PIN code - New PIN code - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_2801	DECT System Settings List - Clock master - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_2901	DECT System Settings List - Base reset - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_2902	DECT System Settings List - Base reset - PIN protected - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_3001	DECT System Settings List - FP IP address - Edit entry - Save entry	O
	TC_PT_NG1.N.16_BV_3501	DECT System Settings List - FP version - Read entries	M
	TC_PT_NG1.N.16_BV_3801	Line Settings List - Line name - Edit entry - Save entry	M
		void	
	TC_PT_NG1.N.16_BV_4002	Line Settings List - Attached handsets - PIN protected - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_4101	Line Settings List - Dialing prefix - Edit entry - Save entry	O
	TC_PT_NG1.N.16_BV_4201	Line Settings List - FP melody - Edit entry - Save entry	O
	TC_PT_NG1.N.16_BV_4301	Line Settings List - FP volume - Edit entry - Save entry	O
	TC_PT_NG1.N.16_BV_4401	Line Settings List - Blocked telephone number - Edit entry - Save entry	O
	TC_PT_NG1.N.16_BV_4501	Line Settings List - Multiple calls mode - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_4601	Line Settings List - Intrusion call - Edit entry - Save entry	M

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	TC_PT_NG1.N.16_BV_4701	Line Settings List - Permanent CLIR - Edit entry - Save entry - 'Value' subfield	M
	TC_PT_NG1.N.16_BV_4702	Line Settings List - Permanent CLIR - Edit entry - Save entry - CLIR code subfields	C1307
	TC_PT_NG1.N.16_BV_4801	Line Settings List - Call forwarding unconditional - Edit entry - Save entry - 'Value' and 'Call forwarding number' subfields	M
	TC_PT_NG1.N.16_BV_4802	Line Settings List - Call forwarding unconditional - Edit entry - Save entry - CFU codes subfields	C1312
	TC_PT_NG1.N.16_BV_4901	Line Settings List - Call forwarding on No answer - Edit entry - Save entry - 'Value' and 'Call forwarding number' subfields	M
	TC_PT_NG1.N.16_BV_4902	Line Settings List - Call forwarding on No answer - Edit entry - Save entry - CFNA codes subfields	C1313
	TC_PT_NG1.N.16_BV_5001	Line Settings List - Call forwarding on Busy subscriber - Edit entry - Save entry - 'Value' and 'Call forwarding number' subfields	M
	TC_PT_NG1.N.16_BV_5002	Line Settings List - Call forwarding on Busy subscriber - Edit entry - Save entry - CFB codes subfields	C1314
	TC_PT_NG1.N.16_BV_5101	DECT System Settings List - Emission mode - Edit entry - Save entry	C1304
	NG1.N.17	**Calling line identity restriction**	M
TC_PT_NG1.N.17	TC_PT_NG1.N.17_BV_301	Temporary CLIR mode (call by call)	M
	NG1.N.18	**Call forwarding (external calls)**	M
TC_PT_NG1.N.18	No test case		
	NG1.N.19	**DTMF handling**	M
TC_PT_NG1.N.19	TC_PT_NG1.N.19_BV_101	Uplink DTMF transmission at call setup when FP connected to classic switching network	M
	TC_PT_NG1.N.19_BV_201	Uplink DTMF transmission when connected	M
	NG1.N.20	**Tones provision**	M
TC_PT_NG1.N.20	TC_PT_NG1.N.20_BV_201	Tones provision by the system - Ring-back tone and Busy tone	M
	TC_PT_NG1.N.20_BV_203	Tones provision by the system - Intercept tone, Negative acknowledgement tone and Call waiting tone	M
	TC_PT_NG1.N.20_BV_206	Tones provision by the system - Dial tone	O
	TC_PT_NG1.N.20_BV_207	Tones provision by the system - Off-hook warning tone	O
	TC_PT_NG1.N.20_BV_208	Tones provision by the system - Network congestion tone	O
	NG1.N.21	**Headset management**	C1305
TC_PT_NG1.N.21	TC_PT_NG1.N.21_BV_101	Headset capability during subscription registration	C1305
	TC_PT_NG1.N.21_BV_102	Headset capability during location registration	C1305
	TC_PT_NG1.N.21_BV_201	Headset call interception - G.722 call	C1305
	TC_PT_NG1.N.21_BV_301	Headset incoming call - G.722 call	C1305
	TC_PT_NG1.N.21_BV_401	Re-dial of last outgoing call	C1306
	TC_PT_NG1.N.21_BV_501	Re-dial of last incoming call	C1306
	TC_PT_NG1.N.21_BV_601	Headset incoming call - G.726 call - Switching from headset to handset (headset initiated)	C1306
	TC_PT_NG1.N.21_BV_701	Headset side - Headset call interception - G.726 call - Switching from headset to handset (handset initiated)	C1305
	TC_PT_NG1.N.21_BV_705	Handset side - Headset call interception - G.722 call - Switching from headset to handset (handset initiated)	C1308
	NG1.N.22	**Handling of lines where second calls are signalled in-band**	M
TC_PT_NG1.N.22	TC_PT_NG1.N.22_BV_401	Use of transparent commands on DCIBS lines (Basic or Off-hook CLIP enabled) or any other line	M
	GAP.N.31	**Internal call**	M
TC_PT_GAP.N.31	TC_PT_GAP.N.31_BV_101	Internal call setup - call class checking	M
	TC_PT_GAP.N.31_BV_301	Internal call CLIP	M
	TC_PT_GAP.N.31_BV_401	Internal call CNIP	M
	TC_PT_GAP.N.31_BV_601	Internal call codec priority - outgoing call	C1311
	TC_PT_GAP.N.31_BV_602	Internal call codec priority - incoming call	C1311

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	GAP.N.34	**Calling Name Identification Presentation (CNIP)**	M
TC_PT_GAP.N.34	TC_PT_GAP.N.34_BV_101	Incoming call with calling party name in {CC-SETUP}	M
	TC_PT_GAP.N.34_BV_102	Incoming call with calling party name in {CC-INFO}	M
	TC_PT_GAP.N.34_BV_103	Incoming call with CLIP and CNIP in {CC-INFO}	M
	GAP.N.35	**Enhanced security**	M
TC_PT_GAP.N.35	TC_PT_GAP.N.35_BV_101	Encryption of all calls	M
	TC_PT_GAP.N.35_BV_201	Indication of Support of 'Re-keying' and 'early encryption' in terminal capabilities during registration	M
	TC_PT_GAP.N.35_BV_202	Indication of Support of 'Re-keying' and 'early encryption' in terminal capabilities during location registration	M
	TC_PT_GAP.N.35_BV_203	Re-keying procedure	M
	TC_PT_GAP.N.35_BV_301	Assignment of default cipher key and usage of early encryption during incoming call	M
	TC_PT_GAP.N.35_BV_302	Usage of early encryption during outgoing call	M
	TC_PT_GAP.N.35_BV_303	Usage of early encryption for MM procedure	M
	TC_PT_GAP.N.35_BV_304	Overwriting a default cipher key by assigning a new default cipher key with the same index	M
	TC_PT_GAP.N.35_BV_305	Assign two default cipher keys with different indices.	M
	TC_PT_GAP.N.35_BV_306	PP releases connection in case FP rejects early encryption on MAC layer	M
	TC_PT_GAP.N.35_BV_501	Release of unexpectedly unencrypted outgoing call in call proceeding state	M
	TC_PT_GAP.N.35_BV_502	Release of unexpectedly unencrypted outgoing call in connect state	M
	TC_PT_GAP.N.35_BV_503	Release of unexpectedly unencrypted incoming call in alerting state	M
	TC_PT_GAP.N.35_BV_504	Release of unexpectedly unencrypted incoming call in connect state.	M
	TC_PT_GAP.N.35_BV_505	Release of unexpectedly unencrypted outgoing call in connect state after switching encryption support in FT off	M
	TC_PT_GAP.N.35_BV_506	Release of unexpectedly unencrypted outgoing call in connect state despite of successful authentication	I (note 2)
	TC_PT_GAP.N.35_BV_507	Release of unexpectedly unencrypted incoming call in connect state despite of successful authentication	M
	NG1.A.1	**Easy PIN code registration**	M
TC_PT_NG1.A.1	TC_PT_NG1.A.1_BV_101	Registration mode automatic access	M
	TC_PT_NG1.A.1_BV_201	Searching mode and PIN code requests	M
	TC_PT_NG1.A.1_BV_301	Base station name selection	O
	TC_PT_NG1.A.1_BV_401	Registration user feedback	M
	NG1.A.2	**Easy pairing registration**	M
TC_PT_NG1.A.2	TC_PT_NG1.A.2_BV_401	Searching mode request (default PIN)	M
	TC_PT_NG1.A.2_BV_402	Searching mode request (switching back to PIN entry)	M
	NG1.A.3	**Handset Locator**	M
TC_PT_NG1.A.3	TC_PT_NG1.A.3_BV_101	Handset Locator	M

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	GAP.A.4	**Terminal Identity number assignment in mono cell system**	O
TC_PT_GAP.A.4	No test case		

NOTE 1: This test case is replaced by TC_PT_NG1.N.16_BV_2114 that uses a longer Contact List.
NOTE 2: This test case is replaced by TC_PT_GAP.N.35_BV_508 that also checks release of subsequent calls.
NOTE 3: If the feature is not supported on FT side, the FT nevertheless implements the sending of a negative acknowledgement for that feature (see clause TS 102 527-3 [14], clause 7.4.3.8.2).
NOTE 4: For a Part 5 IUT, the test becomes a backward compatibility test for Part 5 PPs in front of a Part 3 FP:
- no <<list change details>> IE available, even if the Part 5 PP would normally use caching.

C1301: At least one of the two procedures implicit or explicit call intrusion shall be implemented (see Table A.5 NG1.N.10_1 and NG1.N.10_2).
C1304: IF NG1.M.5 "no-emission" mode is supported THEN "M" ELSE "I".
C1305: IF the PT is a headset PP THEN "M" ELSE "I".
C1306: IF the PT is a headset PP THEN "O" ELSE "I".
C1307: IF CLIR code subfields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_2).
C1308: IF the PT is a headset PP THEN "I" ELSE "O".
C1309: IF several contact numbers in Contact List is supported THEN "M" ELSE "N/A" (see Table A.2PT_IXIT_1).
C1311: IF PP complies one of the exception cases to this procedure listed in clause 7.4.3.9.2 THEN "N/A" ELSE "M" (see Table A.2 PT_IXIT_6).
C1312: IF CFU code sub fields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_3).
C1313: IF CFNA code sub fields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_4).
C1314: IF CFB code sub fields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_5).
C1315: If the PT implements explicit call intrusion (see C1301), at least one of the two procedures "explicit handset intrusion" or "explicit line intrusion" shall be implemented (see TS 102 527-3 [14], clause 7.4.3.8.2).
C1316: IF PT_IXIT_11=YES ("PP uses All Calls List as data source for call logs") THEN I ELSE M (see Table A.2 PT_IXIT_11).

5.3.3 List of New Generation DECT Part 5 PT tests cases

Table 13a gives the list of NG DECT Part 5 test cases related to the DECT "Additional feature set nr. 1 for extended Wideband Speech Services" (TS 102 527-5 [15]) features.

Table 13a: NG DECT Part 5 PT Test Case Index

NG DECT Part 5 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	NG1.N.1	**Codec negotiation**	**M**
TC_PT_NG1.N.1	TC_PT_NG1.N.1_BV_105	NG DECT Part 5 capability during subscription registration	M
	TC_PT_NG1.N.1_BV_106	NG DECT Part 5 capability during location registration	M
	NG1.N.5	**Date and Time synchronization**	**M**
TC_PT_NG1.N.5	TC_PT_NG1.N.5_BV_103	FT Date & Time recovery - request for D&T to idle PP- valid PP clock	M
	TC_PT_NG1.N.5_BV_104	FT Date & Time recovery - request for D&T after locate request - invalid PP clock	M
	NG1.N.7	**Common parallel call procedures (external or internal)**	**M**
TC_PT_NG1.N.7	TC_PT_NG1.N.7_BV_3201	Outgoing parallel external call initiation with Contact List matching	M
	TC_PT_NG1.N.7_BV_3202	Outgoing parallel external call initiation with contact provision by network	M
TC_PT_NG1.N.16	**NG1.N.16**	**List access service**	**M**
	TC_PT_NG1.N.16_BV_1706	Missed Calls List - Initiate incoming call - Consult Missed Calls Log - Initiate outgoing call from log	C1321
	TC_PT_NG1.N.16_BV_1750	Missed Calls List - Read entries - Partial delivery	C1321
	TC_PT_NG1.N.16_BV_1804	Outgoing Calls List - Start session rejection because list is not implemented on FP side.	O (note 1)
	TC_PT_NG1.N.16_BV_2004	All Calls List - Initiate outgoing call - Consult All Calls Log - Initiate new outgoing call from log	C1315
	TC_PT_NG1.N.16_BV_2005	Missed Calls (or All Calls) Log - Transfer (missed call) number from call log to phonebook	M
	TC_PT_NG1.N.16_BV_2006	Incoming Accepted Calls (or All Calls) Log - Incoming first voice call during existing list access session	M
	TC_PT_NG1.N.16_BV_2008	Missed Calls (or All Calls) Log - Delete entry - Max syncing time after log entering	M
	TC_PT_NG1.N.16_BV_2009	Missed Calls (or All Calls) Log - Delete all - Read entries when empty	M
	TC_PT_NG1.N.16_BV_2010	Missed Calls (or All Calls) Log - Browse entries - Initiate external call from missed call	M
	TC_PT_NG1.N.16_BV_2111	Contact List - Handling of three contact numbers	M
	TC_PT_NG1.N.16_BV_2112	Phonebook - Add/remove entries - Max syncing time after contacts modifications	M
	TC_PT_NG1.N.16_BV_2114	Contact List - Slow browsing in a list of 25 entries - Initiate an external call	M (note 2)
	TC_PT_NG1.N.16_BV_2115	Contact List - Fast browsing support without overlap	M

NG DECT Part 5 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	TC_PT_NG1.N.16_BV_2151	Contact List - Read entry - Check 'All lines' correct handling	M
	TC_PT_NG1.N.16_BV_2152	Contact List - Read entries - Check support of any entry id values	M
	TC_PT_NG1.N.16_BV_2153	Contact List - Read entries - Partial delivery	M
	TC_PT_NG1.N.16_BV_2205	Internal Names List - PP handset name related test cases	M
	TC_PT_NG1.N.16_BV_3902	Line Settings List - Line id/Line name - Save entry with editable and non-editable fields	M
	TC_PT_NG1.N.16_BV_5201	DECT system settings list - FP power level - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_6000 (P,D)	LiA/Voice call interaction - LiA with first external outgoing voice call initiation - Audio(P=called phone, D=default codec) (Parameterized test)	I
	TC_PT_NG1.N.16_BV_6004	TC_PT_NG1.N.16_BV_6000 (P= Phone A, D= G.726)	M
	TC_PT_NG1.N.16_BV_6005	TC_PT_NG1.N.16_BV_6000 (P= Phone C, D= G.722)	M
	TC_PT_NG1.N.16_BV_6100 (P,D)	LiA/Voice call interactions - LiA with first external incoming voice call - Audio (P=calling phone, D=defaut codec) (Parameterized test)	I
	TC_PT_NG1.N.16_BV_6104	TC_PT_NG1.N.16_BV_6100 (P= Phone A, D= G.726)	M
	TC_PT_NG1.N.16_BV_6105	TC_PT_NG1.N.16_BV_6100 (P= Phone C, D= G.722)	M
	TC_PT_NG1.N.16_BV_7002	Incoming SMS List - deletion of list	C1317
	TC_PT_NG1.N.16_BV_7003	Incoming SMS List - set Read status to unread	C1317
	TC_PT_NG1.N.16_BV_7004	Incoming SMS List - read SMS details	C1317
	TC_PT_NG1.N.16_BV_7005	Incoming SMS List - save number in message to Contact List	C1318
	TC_PT_NG1.N.16_BV_7006	Incoming SMS List - delete entry	C1317
	TC_PT_NG1.N.16_BV_7101	Sent SMS List - deletion of entry	C1317
	TC_PT_NG1.N.16_BV_7102	Sent SMS List - deletion of list	C1317
	TC_PT_NG1.N.16_BV_7202	Outgoing SMS List - deletion of list	C1317
	TC_PT_NG1.N.16_BV_7301	Draft SMS List - deletion of entry	C1317
	TC_PT_NG1.N.16_BV_7302	Draft SMS List - deletion of list	C1317
	TC_PT_NG1.N.16_BV_7304	Draft SMS List - read number from contact to use as recipient (using consecutive or parallel LiA sessions)	C1317
	TC_PT_NG1.N.16_BV_7401	SMS Settings List - change fields	C1317
	TC_PT_NG1.N.16_BV_8001	{CC-SETUP} crossing - LiA outgoing call from IUT - crossing incoming voice call - incoming call restarted	M
	TC_PT_NG1.N.16_BV_8005	{CC-RELEASE}/{CC-CONNECT} crossing - LiA outgoing call from IUT - crossing incoming voice call - incoming call restarted	M
	NG1.N.23	**Line and diagnostic information**	**M**
TC_PT_NG1.N.23	TC_PT_NG1.N.23_BV_101	Display of line use and handset use statuses of a line - Another PP makes 2 calls on it	M
	TC_PT_NG1.N.23_BV_102	Display of line use/handset use statuses of a line - 2 other PPs make each one call on it	O
	TC_PT_NG1.N.23_BV_103	Display of line use and handset use statuses (multiple lines)	M
	TC_PT_NG1.N.23_BV_104	Display of call forwarding status (multiple lines)	M
	TC_PT_NG1.N.23_BV_105	Display of diagnostic error status (multiple lines) - line related error	M
	TC_PT_NG1.N.23_BV_106	Display of diagnostic error status (multiple lines) - non line-related error	M
	NG1.N.24	**Short Message Service**	**O**
TC_PT_NG1.N.24	TC_PT_NG1.N.24_BV_101	List of Supported Lists - SMS service checked for	M
	TC_PT_NG1.N.24_BV_301	Draft SMS List - PP sending of short message in draft list	C1316
	TC_PT_NG1.N.24_BV_302	Outgoing SMS List - PP sending of short message in PP side editing list	C1316
	TC_PT_NG1.N.24_BV_601	Incoming SMS List - Indication to User of Receipt of Short Message	M
	TC_PT_NG1.N.24_BV_602	Incoming SMS List - Indication to User of Receipt of Short Message while in voice call	M
	NG1.N.25	**Digital Telephone Answering Machine (DTAM)**	**O**
TC_PT_NG1.N.25	TC_PT_NG1.N.25_BV_101	List of Supported Lists - DTAM support - Implementation of DTAM related lists	M

NG DECT Part 5 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	TC_PT_NG1.N.25_BV_103	DTAM Settings List - Edit entry - Edit DTAM timeout	M
	TC_PT_NG1.N.25_BV_104	DTAM Settings list - Validate current PIN code - Save New PIN code	M
	TC_PT_NG1.N.25_BV_105	DTAM Welcome Message list - Delete entry	M
	TC_PT_NG1.N.25_BV_200 (D)	DTAM consulting call to DTAM D - Play around with 2nd message and delete it - Parameterized test	I
	TC_PT_NG1.N.25_BV_201	TC_PT_NG1.N.25_BV_200 (D=DTAM1)	C1322
	TC_PT_NG1.N.25_BV_202	TC_PT_NG1.N.25_BV_200 (D=DTAM2)	C1323
	TC_PT_NG1.N.25_BV_300 (D, WDS)	DTAM consulting call for recording a new Welcome Message for DTAM D, waiting or not for a DTAM status (WDS boolean) - Parameterized test	I
	TC_PT_NG1.N.25_BV_301	TC_PT_NG1.N.25_BV_300(D=DTAM1, WDS=YES)	C1322
	TC_PT_NG1.N.25_BV_302	TC_PT_NG1.N.25_BV_300(D=DTAM1, WDS=NO)	C1322
	TC_PT_NG1.N.25_BV_303	TC_PT_NG1.N.25_BV_300(D=DTAM2, WDS=YES)	C1323
	TC_PT_NG1.N.25_BV_304	TC_PT_NG1.N.25_BV_300(D=DTAM2, WDS=NO)	C1323
	TC_PT_NG1.N.25_BV_400	DTAM Incoming Messages List - Delete message through delete entry	C1322
	NG1.N.26	**Call Screening**	**O**
TC_PT_NG1.N.26	TC_PT_NG1.N.26_BV_101	Call Screening Support on PP	M
	TC_PT_NG1.N.26_BV_201	Call Screening Acceptance and Interception	M
	TC_PT_NG1.N.26_BV_202	Call Screening Rejection	M
	TC_PT_NG1.N.26_BV_301	Call screening Acceptance of waiting call	M
	GAP.N.1	**Outgoing call**	M
TC_PT_GAP.N.1	TC_PT_GAP.N.1_BV_101	Contact List matching in a first external outgoing call (non early CC-CONNECT implementation)	**M**
	TC_PT_GAP.N.1_BV_102	Contact List matching in a first external outgoing call (early CC-CONNECT implementation)	**M**
	TC_PT_GAP.N.1_BV_103	{CC-SETUP} crossing - outgoing voice call from IUT - crossing incoming voice call - incoming call restarted	M
	GAP.N.35	**Enhanced security**	M
TC_PT_GAP.N.35	TC_PT_GAP.N.35_GC_101	Encryption of all calls when registered at an NG DECT Part 3 FP	**M**
	TC_PT_GAP.N.35_BV_508	Release of unexpectedly unencrypted outgoing call in connect state despite of successful authentication - Release of subsequent calls	M
	NG1.A.4	**Base manual transmit power control**	M
		See test case TC_PT_NG1.N.16_BV_5201	
	NG1.A.5	**Handset adaptive transmit power control**	M
TC_PT_NG1.A.5	TC_PT_NG1.A.5_BV_101	Handset adaptive transmit power control - Power attenuation - RSSI increase	M

NOTE 1: The test is optional because implementation of the Outgoing Calls List is optional on PP side. The test exists because the Outgoing Calls List is optional on FP side.
NOTE 2: This test case replaces similar test TC_PT_NG1.N.16_BV_2101 and uses a longer Contact List.

C1315 IF PT_IXIT_11 ("PP uses All Calls List as data source for call logs") THEN M ELSE I (see Table A.2 PT_IXIT_11).
C1316 At least one of the procedures TC_PT_NG1.N.24_BV_301 or TC_PT_NG1.N.24_BV_302 shall be tested (see Table A.2 PT_IXIT_9).
C1317 IF NG1.N.24 (Short Message Service) THEN "M" ELSE "I".
C1318 IF NG1.N.24 (Short Message Service) THEN "O" ELSE "I".
C1321: IF PT_IXIT_11 ("PP uses All Calls List as data source for call logs") THEN I ELSE M (see Table A.2 PT_IXIT_11).
C1322: IF NG1.N.25_5 ('Visual' DTAM profile; see Table A.6) THEN "M" ELSE "I".
C1323: IF NG1.N.25_4 ('Voice-oriented' DTAM profile; see Table A.6) THEN "M" ELSE "I".

5.4 Fixed Part TC purposes

5.4.1 List of New Generation DECT Part 1 FT tests cases

Table 14 gives the list of NG DECT Part 1 test cases related to the DECT "Wideband speech" (TS 102 527-1 [13]) features and their status for a Part 5 FT. The definition of these test cases can be found in TS 102 841 [16].

These test cases shall be implemented with the NG DECT Part 5 requirements (see clause 5.1).

Table 14: NG DECT Part 1 FT Test Case Index

NG DECT Part 3 FT test case index related to NG DECT Part 1 features			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 FT Status**
	NG1.N.1	**Codec Negotiation**	M
TC_FT_NG1.N.1	TC_FT_NG1.N.1_BV_101	Exchange of codec list during subscription registration	M
	TC_FT_NG1.N.1_BV_102	Exchange of codec list during location registration	M
	TC_FT_NG1.N.1_BV_103	NG DECT Part 1 higher layer capabilities	M
	TC_FT_NG1.N.1_BV_201	Basic service wideband speech	M
	TC_FT_NG1.N.1_BV_301	Outgoing G.722 call using long slot MAC setup	M
	TC_FT_NG1.N.1_BV_302	Outgoing G.726 call using full slot MAC setup	M
	TC_FT_NG1.N.1_BV_303	Outgoing G.722 call using full slot MAC setup	M
	TC_FT_NG1.N.1_BV_304	Outgoing G.726 call using long slot MAC setup	M
	TC_FT_NG1.N.1_BV_305	Outgoing G.722 call, fall back to a G.726 codec when full to long slot type modification fails	M
	TC_FT_NG1.N.1_BV_306	Outgoing call without sending any IE <<CODEC-LIST>> in {CC-SETUP}	M
	TC_FT_NG1.N.1_BV_307	Outgoing call with an IE <<CODEC-LIST>> in {CC-SETUP} different from previous sent during location registration	M
	TC_FT_NG1.N.1_BV_321	Incoming call G.722	M
	TC_FT_NG1.N.1_BV_322	Incoming call G.726	M
	TC_FT_NG1.N.1_BV_323	Incoming call G.722, negotiation results in G.726	M
	TC_FT_NG1.N.1_WC_101	Outgoing call Wideband at NG DECT Part 1 Golden Device PT (Golden Device A)	M
	TC_FT_NG1.N.1_WC_103	Incoming call Wideband at NG DECT Part 1 Golden Device PT (Golden Device A)	M
	TC_FT_NG1.N.1_WC_105	Service change at NG DECT Part 1 Golden Device PT (Golden Device A)	M
	NG1.N.2	**Codec switching**	M
TC_FT_NG1.N.2	No test case		
	GAP.N.30	**Calling Line Identification Presentation (CLIP)**	M
TC_FT_GAP.N.30	TC_FT_GAP.N.30_BV_01	Incoming call with calling party number	M

5.4.2 List of New Generation DECT Part 3 FT tests cases

Table 15 gives the list of NG DECT Part 3 test cases related to the DECT "Extended Wideband Speech Services" (TS 102 527-3 [14]) features and their status for a Part 5 FT. The definition of these test cases can be found in TS 102 841 [16].

These test cases shall be implemented with the NG DECT Part 5 requirements (see clause 5.1).

Table 15: NG DECT Part 3 FT Test Case Index

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	NG1.N.1	**Codec negotiation**	M
TC_FT_NG1.N.1	TC_FT_NG1.N.1_BV_104	NG DECT Part 3 higher layer capabilities	M
	NG1.N.3	**Missed call notification**	M
TC_FT_NG1.N.3	TC_FT_NG1.N.3_BV_201	Missed call notification after PP location registration	M
	NG1.N.4	**Voice message waiting notification**	M
TC_FT_NG1.N.4	TC_FT_NG1.N.4_BV_201	Voice message waiting notification, activation	M
	TC_FT_NG1.N.4_BV_202	Voice message waiting notification, deactivation	M
	NG1.N.5	**Date and Time synchronization**	M
TC_FT_NG1.N.5	TC_FT_NG1.N.5_BV_101	FT initiated Date and Time synchronization	M
	TC_FT_NG1.N.5_BV_102	PT initiated Date and Time synchronization	M
	NG1.N.6	**Parallel Calls**	M
TC_FT_NG1.N.6	TC_FT_NG1.N.6_BV_401	Codec change for parallel calls from G.722 to G.726	M
	TC_FT_NG1.N.6_BV_402	Codec change for parallel calls from G.726 to G.722	M
	TC_FT_NG1.N.6_BV_501	Sending negative acknowledgement - invalid call toggle request	M
	TC_FT_NG1.N.6_BV_601	Busy system notification	C1513
	NG1.N.7	**Common parallel call procedures (external or internal)**	M
TC_FT_NG1.N.7	TC_FT_NG1.N.7_BV_101	Outgoing parallel call initiation (external), FP managed line selection	M
	TC_FT_NG1.N.7_BV_102	Outgoing parallel call initiation (internal)	M
	TC_FT_NG1.N.7_BV_103	Outgoing parallel call initiation (external), line selection using <<CALL-INFORMATION>> IE in {CC-INFO}	M
	TC_FT_NG1.N.7_BV_201	Call waiting indication (external) - CLIP on call waiting indication - End of call waiting indication	M
	TC_FT_NG1.N.7_BV_202	Call waiting indication (internal) - CLIP on call waiting indication - End of call waiting indication	M
	TC_FT_NG1.N.7_BV_301	Call toggle (external)	M
	TC_FT_NG1.N.7_BV_302	Call toggle (internal)	M
	TC_FT_NG1.N.7_BV_401	Call release and call release rejection - Resuming a call put on-hold	C1501
	TC_FT_NG1.N.7_BV_601	Call waiting acceptance (from PP to FP) (external)	M
	TC_FT_NG1.N.7_BV_602	Call waiting acceptance (from PP to FP) (internal)	M
	TC_FT_NG1.N.7_BV_701	Active call release with replacement (from PP to FP) - call waiting (external)	M
	TC_FT_NG1.N.7_BV_702	Active call release with replacement (from PP to FP) - call on-hold (external)	M
	TC_FT_NG1.N.7_BV_801	Call waiting rejection (from PP to FP) (external)	C1502
	TC_FT_NG1.N.7_BV_901	Putting a call on hold (external) - Resuming a call put on-hold	C1503
	TC_FT_NG1.N.7_BV_902	Putting a call on hold (internal) - Resuming a call put on-hold	M
	TC_FT_NG1.N.7_BV_1201	CNIP on call waiting indication (external)	M
	TC_FT_NG1.N.7_BV_1202	CNIP on call waiting indication (internal)	M
	NG1.N.8	**Call transfer (external or internal)**	M
TC_FT_NG1.N.8	TC_FT_NG1.N.8_BV_101	Call transfer (external) - announced	M
	TC_FT_NG1.N.8_BV_201	Call transfer (external) - unannounced	M
	TC_FT_NG1.N.8_BV_301	Call re-injection to the system (external) - announced	M
	TC_FT_NG1.N.8_BV_302	Call re-injection to the system (external) - unannounced	M
	TC_FT_NG1.N.8_BV_401	Remote party CLIP on call transfer	M
	TC_FT_NG1.N.8_BV_501	Remote party CNIP on call transfer	M
	NG1.N.9	**3-party conference with established external and/or internal calls**	M
TC_FT_NG1.N.9	TC_FT_NG1.N.9_BV_101	3-party conference with established external and internal calls - release from non initiating internal party	M
	TC_FT_NG1.N.9_BV_102	3-party conference with established external and internal calls - release of external party from initiating PP	M

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_NG1.N.9_BV_103	3-party conference with established external calls - release from initiating party	O
	TC_FT_NG1.N.9_BV_104	3-party conference with established external calls on two different lines - release from initiating party	C1514
	TC_FT_NG1.N.9_BV_105	Three-party conference call - Extended Higher Layer Capabilities (Part 2)	M
	NG1.N.10	**Intrusion call**	M
TC_FT_NG1.N.10	TC_FT_NG1.N.10_BV_101	Implicit call intrusion into a line in "single call" mode (non-early {CC-CONNECT} implementation) - release from intruder - G.726 call	C1522
	TC_FT_NG1.N.10_BV_102	Implicit call intrusion into a line in "single call" mode (early {CC-CONNECT} implementation) - release from intruder - G.726 call	C1522
	TC_FT_NG1.N.10_BV_103	Explicit call intrusion into a line in "single call" mode (non-early {CC-CONNECT} implementation) with targeted line specified in {CC-SETUP} - release from intruder - G.722 call	C1522
	TC_FT_NG1.N.10_BV_104	Explicit call intrusion into a line in "single call" mode (early {CC-CONNECT} implementation) with targeted line specified in {CC-SETUP} - release from intruder - G.722 call	C1522
	TC_FT_NG1.N.10_BV_105	Implicit call intrusion into a line in "single call" mode on a multiple line system (non early CC-CONNECT implementation) with targeted line specified in {CC-INFO} - release from intruder - G.722 call	C1522
	TC_FT_NG1.N.10_BV_106	Implicit call intrusion into a line in "single call" mode on a multiple line system (early CC-CONNECT implementation) with targeted line specified in {CC-INFO} - release from intruder - G.722 call	C1522
	TC_FT_NG1.N.10_BV_201	Explicit call intrusion into a line in "single call" mode (non-early {CC-CONNECT} implementation) - handset intrusion - G.722 call	C1522
	TC_FT_NG1.N.10_BV_202	Explicit call intrusion into a line in "single call" mode (early {CC-CONNECT} implementation)- handset intrusion - G.722 call	C1522
	TC_FT_NG1.N.10_BV_203	Explicit call intrusion into a line in "single call" mode - line intrusion with target in {CC-INFO} - G.722 call	C1522
	TC_FT_NG1.N.10_BV_204	Explicit call intrusion into a line in "single call" mode (early {CC-CONNECT} implementation) - line intrusion with target in {CC-INFO} - G.722 call	C1522
	TC_FT_NG1.N.10_BV_301	Intrusion Call - Extended Higher Layer Capabilities (Part 2)	M
	NG1.N.11	**Call deflection (external or internal)**	O
TC_FT_NG1.N.11	TC_FT_NG1.N.11_BV_101	Call deflection (internal) in multiple lines context	C1514
	TC_FT_NG1.N.11_BV_201	Call deflection (external) - first incoming call deflection	M
	TC_FT_NG1.N.11_BV_202	Call deflection (external) - call waiting deflection	M
	NG1.N.12	**Line identification**	M
TC_FT_NG1.N.12	TC_FT_NG1.N.12_BV_301	Line identification for a first external outgoing call using <<CALL-INFORMATION>> IE in {CC-INFO} (non early CC-CONNECT implementation)	C1515
	TC_FT_NG1.N.12_BV_302	Line identification for a first external outgoing call using <<CALL-INFORMATION>> IE in {CC-INFO} (early CC-CONNECT implementation)	C1515
	TC_FT_NG1.N.12_GC_401	Backward-compatible line identification for a first external outgoing call using <<MULTI-KEYPAD>> IE (non early CC-CONNECT implementation)	O (note 1)
	TC_FT_NG1.N.12_GC_402	Backward-compatible line identification for a first external outgoing call using IE <<MULTI-KEYPAD>> IE (early CC-CONNECT implementation)	O (note 1)
	TC_FT_NG1.N.12_BV_501	FP managed line selection for a first external outgoing call (non early CC-CONNECT implementation)	C1516

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_NG1.N.12_BV_502	FP managed line selection for a first external outgoing call (early CC-CONNECT implementation)	C1516
	NG1.N.13	Call identification	M
TC_FT_NG1.N.13	TC_FT_NG1.N.13_BV_201	Call identifier assignment on outgoing call (FP to PP) - Normal call (non early CC-CONNECT implementation) - Call status indication	C1511
	TC_FT_NG1.N.13_BV_202	Call identifier assignment on outgoing call (FP to PP) - Normal call (early CC-CONNECT implementation) - Call status indication	C1511
	TC_FT_NG1.N.13_BV_203	Call identifier assignment on outgoing call (FP to PP) - Internal call - Call status indication	M
	TC_FT_NG1.N.13_BV_204	Call identifier assignment on outgoing call (FP to PP) - LiA service setup - Call status indication for outgoing external call	M
	TC_FT_NG1.N.13_BV_205	Call identifier assignment on outgoing call (FP to PP) - LiA service setup - Call status indication for internal call	M
	TC_FT_NG1.N.13_BV_301	Call identifier assignment on incoming call (FP to PP) - Normal call setup	M
	TC_FT_NG1.N.13_BV_302	Call identifier assignment on incoming call (FP to PP) - LiA service setup - Call status indication for incoming external call	M
	NG1.N.14	**Multiple Lines**	O
TC_FT_NG1.N.14	TC_FT_NG1.N.14_BV_301	Incoming external calls on a multiple line system - Incoming calls on two lines with no active PPs	M
	TC_FT_NG1.N.14_BV_302	Incoming external calls on a multiple line system - Incoming calls with one active PP - Accept second call on idle PP and release it	M
	TC_FT_NG1.N.14_BV_303	Incoming external calls on a multiple line system - Incoming calls with one active PP - Accept second call on active PP and release it - Resume active call	C1517
	TC_FT_NG1.N.14_BV_304	Incoming external calls on a multiple line system - Two simultaneous incoming calls	M
	TC_FT_NG1.N.14_BV_305	Outgoing external calls on a multiple line system - Initiate outgoing calls on two lines (non early CC-CONNECT implementation)	C1518
	TC_FT_NG1.N.14_BV_306	Outgoing external calls on a multiple line system - Initiate outgoing calls on two lines (early CC-CONNECT implementation)	C1518
	TC_FT_NG1.N.14_BV_401	Internal calls in multiple line context	M
	NG1.N.15	**Multiple calls**	M
TC_FT_NG1.N.15	TC_FT_NG1.N.15_BV_201	Incoming external calls on a multiple call line - Accept incoming second call on idle PP	M
	TC_FT_NG1.N.15_BV_202	Incoming external calls on a multiple call line - Accept incoming second call on active PP	M
	TC_FT_NG1.N.15_BV_205	Outgoing external calls on a multiple call line - Initiate outgoing second call on idle PP (non early CC-CONNECT implementation)	C1519
	TC_FT_NG1.N.15_BV_206	Outgoing external calls on a multiple call line - Initiate outgoing second call on idle PP (early CC-CONNECT implementation)	C1519
	TC_FT_NG1.N.15_BV_207	Outgoing external calls on a multiple call line - Initiate outgoing second call on active PP using <<CALL-INFORMATION>> line selection	M
	TC_FT_NG1.N.15_BV_301	Busy line notification	M
	NG1.N.16	**List access service**	M
TC_FT_NG1.N.16	TC_FT_NG1.N.16_BV_301	Start / end session sequencing and parameters - List of Supported Lists	M
	TC_FT_NG1.N.16_BV_302	CC-RELEASE without end session - List of Supported Lists	M
	TC_FT_NG1.N.16_BV_303	No simultaneous access to the same list from 2 different PPs - Internal Names List	C1510

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_NG1.N.16_BV_304	Simultaneous access to the same list from 2 different PPs (check edit locks an entry)- Internal Names List	C1510
	TC_FT_NG1.N.16_BV_305	Edit Current PIN code while Line setting list session is open	M
	TC_FT_NG1.N.16_BV_1601	List of Supported Lists - read entries	M
	TC_FT_NG1.N.16_BV_1701	Missed Calls List - Delete list - Read entries when empty	M
	TC_FT_NG1.N.16_BV_1702	Missed Calls List - List change notification - Read entries when new entries	M
	TC_FT_NG1.N.16_BV_1703	Missed Calls List - Delete entry - Negative acknowledgement	M
	TC_FT_NG1.N.16_BV_1704	Missed Calls List - Transfer number from Missed Calls List to Contact List	M
	TC_FT_NG1.N.16_BV_1705	Missed Calls List - Initiate a voice call during a list access session	M
	TC_FT_NG1.N.16_BV_1706	Missed Calls List - List access during existing voice call with second call initiation - Switching between LA session and voice call - Returning to LA session after voice call termination	M
	TC_FT_NG1.N.16_BV_1801	Outgoing Calls List - Delete list - Read entries when empty	O
	TC_FT_NG1.N.16_BV_1802	Outgoing Calls List - Read entries when new entries	O
	TC_FT_NG1.N.16_BV_1803	Outgoing Calls List - Delete entry - Negative acknowledgement	O
	TC_FT_NG1.N.16_BV_1901	Incoming Accepted Calls List - Delete list - Read entries when empty	M
	TC_FT_NG1.N.16_BV_1902	Incoming Accepted Calls List - Read entries when new entries	M
	TC_FT_NG1.N.16_BV_1903	Incoming Accepted Calls List - Delete entry - Negative acknowledgement	M
	TC_FT_NG1.N.16_BV_2101	Contact List - Delete list - Read entries when empty	M
	TC_FT_NG1.N.16_BV_2102	Contact List - Save entry - Read entries in ascending order	M
	TC_FT_NG1.N.16_BV_2103	Contact List - Query supported entry fields - Read entries in descending order	M
	TC_FT_NG1.N.16_BV_2104	Contact List - Edit entry - add a second contact number field to an entry	M
	TC_FT_NG1.N.16_BV_2105	Contact List - Edit entry - Save entry without changing the entry	M
	TC_FT_NG1.N.16_BV_2106	Contact List - Search entries using matching options	M
	TC_FT_NG1.N.16_BV_2107	Contact List - Search entries in ascending order and descending order	M
	TC_FT_NG1.N.16_BV_2108	Contact List - Initiate a voice call during a list access session	M
	TC_FT_NG1.N.16_BV_2109	Contact List - Entry used to update Outgoing Calls List	C1521
	TC_FT_NG1.N.16_BV_2110	Contact List - Delete entry - Negative acknowledgement	M
	TC_FT_NG1.N.16_BV_2111	Contact List - Incoming first voice call during existing list access session	M
	TC_FT_NG1.N.16_BV_2201	Internal Names List - Edit entry - Save entry	M
	TC_FT_NG1.N.16_BV_2202	Internal Names List - New registration - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_2203	Internal Names List - Initiate and check internal call from Internal Names List	M
	TC_FT_NG1.N.16_BV_2210	Internal Names List - Delete entry	M
	TC_FT_NG1.N.16_BV_2301	All Incoming Calls List - Delete list - Read entries when empty	O
	TC_FT_NG1.N.16_BV_2302	All Incoming Calls List - Read entries when new entries	O
	TC_FT_NG1.N.16_BV_2303	All Incoming Calls List - Delete entry - Negative acknowledgement	O
	TC_FT_NG1.N.16_BV_2401	DECT System Settings List - Query supported entry fields	M
	TC_FT_NG1.N.16_BV_2402	DECT System Settings List - Read entries	M

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_NG1.N.16_BV_2501	Line Settings List - Query supported entry fields	M
	TC_FT_NG1.N.16_BV_2502	Line Settings List - Read entries	M
	TC_FT_NG1.N.16_BV_2701	DECT System Settings List - Current PIN code - New PIN code - Edit entry - Save entry	M
	TC_FT_NG1.N.16_BV_2801	DECT System Settings List - Clock master- Edit entry - Save entry- Read entries	M
	TC_FT_NG1.N.16_BV_2901	DECT System Settings List - Base reset - Edit entry - Save entry - Read entries	M
	TC_FT_NG1.N.16_BV_2902	DECT System Settings List - Base reset - Read entries - Default settings values	M
	TC_FT_NG1.N.16_BV_3001	DECT System Settings List - FP IP address - Edit entry - Save entry - Read entries	O
	TC_FT_NG1.N.16_BV_3501	DECT System Settings List - FP version - Read entries	M
	TC_FT_NG1.N.16_BV_3801	Line Settings List - Line name- Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_3901	Line Settings List - Line id - Edit entry - Save entry- Read entries	M
	TC_FT_NG1.N.16_BV_4001	Line Settings List - Attached handsets - Edit entry - Save entry - List change notification - Read entries after registration	M
	TC_FT_NG1.N.16_BV_4101	Line Settings List - Dialling Prefix - Edit entry - Save entry - Read entries- Outgoing call	O
	TC_FT_NG1.N.16_BV_4201	Line Settings List - FP melody - Edit entry - Save entry - Read entries	O
	TC_FT_NG1.N.16_BV_4301	Line Settings List - FP volume - Edit entry - Save entry Read entries	O
	TC_FT_NG1.N.16_BV_4401	Line Settings List - Blocked number - Edit entry - Save entry Read entries- Outgoing call blocked	O
	TC_FT_NG1.N.16_BV_4501	Line Settings List - Multiple calls mode - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_4601	Line Settings List - Intrusion call - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_4701	Line Settings List - Permanent CLIR - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_4801	Line Settings List - Call Forwarding unconditional - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_4901	Line Settings List - Call Forwarding on no answer - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_5001	Line Settings List - Call Forwarding on busy subscriber - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_5101	DECT System Settings List - Emission mode - Edit entry - Save entry - Read entries	C1506
	NG1.N.17	**Calling line identity restriction**	M
TC_FT_NG1.N.17	TC_FT_NG1.N.17_BV_201	Permanent CLIR mode (all calls)	M
	TC_FT_NG1.N.17_BV_202	Permanent CLIR - Extended higher layer capabilities (Part 2)	M
	NG1.N.18	**Call forwarding (external calls)**	M
TC_FT_NG1.N.18	TC_FT_NG1.N.18_BV_201	External Call Forwarding Unconditional (CFU) to external number	M
	TC_FT_NG1.N.18_BV_301	External Call Forwarding on No Answer (CFNA) to external number	M
	TC_FT_NG1.N.18_BV_401	External Call Forwarding on Busy subscriber (CFB) to external number	C1512
	NG1.N.19	**DTMF handling**	M
TC_FT_NG1.N.19	TC_FT_NG1.N.19_BV_401	Local DTMF feedback of dialled digits	M
	NG1.N.20	**Tones provision**	M
TC_FT_NG1.N.20	TC_FT_NG1.N.20_BV_201	Tones provision by the system - Ring-back tone	C1523
	TC_FT_NG1.N.20_BV_202	Tones provision by the system - Busy tone	C1523
	TC_FT_NG1.N.20_BV_203	Tones provision by the system - Call waiting tone	C1523

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_NG1.N.20_BV_204	Tones provision by the system - Negative acknowledgement tone	M
		Void (Intercept tone tested in test group TC_FT_NG1.N.21)	
	TC_FT_NG1.N.20_BV_206	Tones provision by the system - Dial tone	O (note 2)
	TC_FT_NG1.N.20_BV_207	Tones provision by the system - Off-hook warning tone	O (note 2)
	TC_FT_NG1.N.20_BV_210	Tones provision by the system - Ring-back tone on parallel call	C1523
	TC_FT_NG1.N.20_BV_220	Tones provision by the system - Backward compatibility with legacy PPs	M
	TC_FT_NG1.N.20_BV_301	Transparency to tones provision by the network or PABX- Dial tone and ring back tone for a first call	C1523
	TC_FT_NG1.N.20_BV_302	Transparency to tones provision by the network or PABX - Busy tone	C1523
	TC_FT_NG1.N.20_BV_303	Transparency to tones provision by the network or PABX - Call waiting tone	C1523
	TC_FT_NG1.N.20_BV_304	Transparency to tones provision by the network or PABX - Dial tone and ring back tone for outgoing parallel call	C1523
	NG1.N.21	**Headset management**	M
TC_FT_NG1.N.21	TC_FT_NG1.N.21_BV_201	Headset call interception - G.722 call	M
	TC_FT_NG1.N.21_BV_202	Headset call interception - G.726 call	M
	TC_FT_NG1.N.21_BV_204	Headset call interception - Control code failed	M
	TC_FT_NG1.N.21_BV_701	Switching from headset to handset (handset initiated) - G.722 call	M
	NG1.N.22	**Handling of lines where second calls are signalled in-band**	O
TC_FT_NG1.N.22	TC_FT_NG1.N.22_BV_101	Off-hook CLIP enabled 'double call with in-band signalling' lines - double call with in-band signalling type for outgoing call (first and second call)	M
	TC_FT_NG1.N.22_BV_301	Off-hook CLIP enabled 'double call with in-band signalling' lines - Call release	C1507
	TC_FT_NG1.N.22_BV_302	Off-hook CLIP enabled 'double call with in-band signalling' lines - Call waiting rejection (from PP to FP) (external)	C1508
	TC_FT_NG1.N.22_BV_303	Off-hook CLIP enabled 'double call with in-band signalling' lines - Putting a call on hold (external)	C1509
	GAP.N.31	**Internal call**	M
TC_FT_GAP.N.31	TC_FT_GAP.N.31_BV_101	Internal call setup - internal call class	M
	TC_FT_GAP.N.31_BV_102	Internal call setup - internal general call	M
	TC_FT_GAP.N.31_BV_301	Internal call CLIP	M
	TC_FT_GAP.N.31_BV_401	Internal call CNIP	M
	TC_FT_GAP.N.31_BV_601	Internal call codec priority	M
	GAP.N.34	**Calling Name Identification Presentation (CNIP)**	M
TC_FT_GAP.N.34	TC_FT_GAP.N.34_BV_101	Incoming call with calling party name	M
	TC_FT_GAP.N.34_BV_201	Incoming call with UTF-8 calling party name	C1520
	TC_FT_GAP.N.34_GC_201	Incoming call with calling party name - UTF-8 to IA5 characters translation	C1520
	GAP.N.35	**Enhanced security**	M
	TC_FT_GAP.N.35_BV_101	Verify that FT enables encryption for incoming call within timer < MM_encryption_check.1 >	M
	TC_FT_GAP.N.35_BV_102	Verify that FT enables encryption for outgoing call within timer < MM_encryption_ check.1 >	M
	TC_FT_GAP.N.35_BV_105	Release of unencrypted call in case of wrong answer to authentication request	M
	TC_FT_GAP.N.35_BV_106	Release of unencrypted call in case of missing answer to authentication request	M

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	TC_FT_GAP.N.35_BV_107	Release of unencrypted call in case of PP sending {AUTHENTICATION-REJECT} message	M
	TC_FT_GAP.N.35_BV_108	Release of unencrypted call in case of cipher reject.	M
	TC_FT_GAP.N.35_BV_109	Release of unencrypted call in case of missing encryption activation on MAC layer.	M
	TC_FT_GAP.N.35_BV_201	Verify indication of Support of 'Re-keying' and 'early encryption' in extended higher layer capabilities part 2	M
	TC_FT_GAP.N.35_BV_202	Usage and frequency of re-keying procedure	M
	TC_FT_GAP.N.35_BV_203	Abnormal release if encryption for re-keying is not activated in MAC layer	M
	TC_FT_GAP.N.35_BV_204	Abnormal release if PP does not answer to {AUTHENTICATION-REQUEST} message for re-keying procedure	M
	TC_FT_GAP.N.35_BV_205	Abnormal release if PP answers to {AUTHENTICATION-REQUEST} message for re-keying procedure with { AUTHENTICATION-REJECT}	M
	TC_FT_GAP.N.35_BV_206	Abnormal release if PP answers to {CIPHER_REQUEST} message for re-keying procedure with { CIPHER_REJECT}	M
	TC_FT_GAP.N.35_BV_301	Assignment of default cipher key and usage of early encryption during incoming call.	M
	TC_FT_GAP.N.35_BV_302	Usage of early encryption during outgoing call	M
	TC_FT_GAP.N.35_BV_303	Usage of early encryption for MM procedure	M
	TC_FT_GAP.N.35_BV_401	Duration of registration window	M
	TC_FT_GAP.N.35_BV_402	Closing of registration window after successful registration.	M
	NG1.A.1	**Easy PIN code registration**	O
TC_FT_NG1.A.1	TC_FT_NG1.A.1_BV_401	Registration user feedback	O
	NG1.A.2	**Easy pairing registration**	M
TC_FT_NG1.A.2	TC_FT_NG1.A.2_BV_301	Base station limited registration mode	M
	TC_FT_NG1.A.2_BV_501	Base station name selection	M
	NG1.A.3	**Handset Locator**	O
TC_FT_NG1.A.3	TC_FT_NG1.A.3_BV_101	Handset Locator	O
	GAP.A.4	**Terminal Identity number assignment in mono cell system**	O
TC_FT_GAP.A.4	No test case		

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
C1501: IF NG1.N.22 AND call release command is not supported THEN "N/A" ELSE "M".			
C1502: IF NG1.N.22 AND call waiting rejection command is not supported THEN "N/A" ELSE "M".			
C1503: IF NG1.N.22 AND putting a call on-hold command is not supported THEN "N/A" ELSE "M".			
C1506: IF NG1.M.5 "no-emission" mode is supported THEN "M" ELSE "I".			
C1507: IF call release command is not supported THEN "M" ELSE "N/A".			
C1508: IF call waiting rejection command is not supported THEN "M" ELSE "N/A".			
C1509: IF putting a call on-hold command is not supported THEN "M" ELSE "N/A".			
C1510: Tests cases are exclusive: IF FP supports simultaneous accesses to the same list from 2 PPs THEN run TC_FT_NG1.N.16_BV_304 ELSE run TC_FT_NG1.N.16_BV_303 (see Table A.15 FT_IXIT_11 FT_IXIT_11).			
C1511: Tests cases are exclusive: IF FP implements 'non early CC-CONNECT' on line 0 THEN run TC_FT_NG1.N.13_BV_201 ELSE run TC_FT_NG1.N.13_BV_202 (see Table A.16 FT_IXIT_22).			
C1512: IF FP triggers the Call Forwarding Busy when second incoming call occurs THEN "M" else "I" (see FT_IXIT_16 in Table A.15).			
C1513: IF FP supports three parallel call contexts (or more) on one PP-FP pair THEN "I" else "M" (see FT_IXIT_15 in Table A.15).			
C1514: IF NG1.N.14 "Multiple lines" is supported THEN "O" ELSE "I".			
C1515: Tests cases are exclusive: IF FP implements 'non early CC CONNECT' on line 0 THEN run TC_FT_NG1.N.12_BV_301 ELSE run TC_FT_NG1.N.12_BV_302 (see Table A.16 FT_IXIT_22).			
C1516: Tests cases are exclusive: IF FP implements 'non early CC CONNECT' on line 0 THEN run TC_FT_NG1.N.12_BV_501 ELSE run TC_FT_NG1.N.12_BV_502 (see Table A.16 FT_IXIT_22).			
C1517: IF (NG1.N.22 "Handling of lines where second calls are signalled in band" is supported on line 1 AND the call release command is not supported by the line 1) OR (NG1.N.22 "Handling of lines where second calls are signalled in band" is supported on line 0 AND the resuming a call put on hold command is not supported by the line 0) THEN N/A ELSE "M" (see Table A.17 FT_IXIT_31 and FT_IXIT_34 or Table A.16 FT_IXIT_21 and FT_IXIT_27).			
C1518: Tests cases are exclusive: IF FP implements 'non early CC CONNECT' on line 0 and line 1 THEN run TC_FT_NG1.N.15_BV_305 ELSE run TC_FT_NG1.N.15_BV_306 (see Table A.16 FT_IXIT_22 and Table A.17 FT_IXIT_32).			
C1519 Test cases are exclusive: if FP implements 'non early CC-CONNECT' on line 0 THEN run TC_FT_NG1.N.15_BV_205 ELSE TC_FT_NG1.N.15_BV_206 (see Table A.16 FT_IXIT_22.			
C1520: IF FP is connected to an UTF-8 CNIP enabled line THEN "M" ELSE "N/A" (see Table A.16 FT_IXIT_23).			
C1521: IF NG1.N.16_18 "Outgoing Calls List" is supported THEN "M" ELSE "I".			
C1522: Tests cases are exclusive: IF FP implements 'non early CC CONNECT' on line 0 THEN run the five tests TC_FT_NG1.N.10_BV_101, 105, 103, 203, 201 ELSE run TC_FT_NG1.N.10_BV_102, 106, 104, 204, 202 (see Table A.16 FT_IXIT_22).			
C1523: Tests cases are exclusive: They correspond to mandatory tones. For each tone, the manufacturer shall declare which procedure is supported to provide this tone on external call (NG1.N.20_2 or NG1.N.20_3) and run only the corresponding test cases (see Table A.26 in TS 102 841 [16]).			
NOTE 1: The procedure NG1.N.12_4 corresponding to those two tests is optional. When procedure is supported, test cases are exclusive: if FP implements 'non early CC-CONNECT' on line 0 THEN run TC_FT_NG1.N.12_GC_401 ELSE run TC_FT_NG1.N.12_GC_402 (see Table A.16, FT_IXIT_22).			
NOTE 2: These tones are optional. For each tone, the manufacturer shall declare which procedure is supported to provide this tone on external call (NG1.N.20_2 or NG1.N.20_3) and run only the corresponding test cases (see Table A.26 in TS 102 841 [16]).			

5.4.3 List of New Generation DECT Part 5 FT tests cases

Table 15a gives the list of NG DECT Part 5 test cases related to the DECT "Additional feature set nr. 1 for extended Wideband Speech Services" (TS 102 527-5 [15]) features.

Table 15a: NG DECT Part 5 FT Test Case Index

NG DECT Part 5 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	NG1.N.1	**Codec negotiation**	M
TC_FT_NG1.N.1	TC_FT_NG1.N.1_BV_105	NG DECT Part 5 higher layer capabilities	M
	NG1.N.5	**Date and Time synchronization**	M
TC_FT_NG1.N.5	TC_FT_NG1.N.5_BV_103	PT Date and Time recovery, after location registration	M
	TC_FT_NG1.N.5_BV_104	FT Date and Time recovery - FP off during 1 minute	M
	TC_FT_NG1.N.5_BV_105	FT Date and Time recovery - FP short reboot (no locate request)	M
	NG1.N.8	**Call transfer (external or internal)**	M
TC_FT_NG1.N.8	TC_FT_NG1.N.8_BV_103	G.726 Call transfer (external) - announced	M
	TC_FT_NG1.N.8_BV_201	G.726 Call transfer (external) - unannounced	M
	TC_FT_NG1.N.8_BV_402	Remote party CLIP on **unannounced** call transfer - Transfer of external **outgoing** call	M
	TC_FT_NG1.N.8_BV_502	Remote party CNIP on **unannounced** call transfer - Transfer of external **outgoing** call	M
	NG1.N.16	**List access service**	M
TC_FT_NG1.N.16	TC_FT_NG1.N.16_BV_1707	Missed Calls List - Initiate incoming call - LiA - Initiate outgoing call from LiA	M
	TC_FT_NG1.N.16_BV_1750	Missed Calls List - Empty number and name fields format used when value unavailable	M
	TC_FT_NG1.N.16_BV_1804	Outgoing Calls List - Start session rejection because list is not implemented on FP side	C1524
	TC_FT_NG1.N.16_BV_2004	All Calls List - Initiate outgoing call - LiA - Initiate new outgoing call from LiA	M
	TC_FT_NG1.N.16_BV_2005	All Calls List - Read status editing - uniform modification over all other call lists	M
	TC_FT_NG1.N.16_BV_2006	All Calls list - Delete list - Read entries with list empty	M
	TC_FT_NG1.N.16_BV_2007	All Calls List - Create entries -- Check entries content	M
	TC_FT_NG1.N.16_BV_2008	All Calls List - Delete entry - Negative acknowledgement (or NOT)	M
	TC_FT_NG1.N.16_BV_2112	Contact List - Handling of three contact numbers	M
	TC_FT_NG1.N.16_BV_2115	Contact List - Fast browsing support with overlap control	M
	TC_FT_NG1.N.16_BV_2116	Contact List - Read entries command response time - one entry read	M
	TC_FT_NG1.N.16_BV_2150	Contact List - Search entries - Searched letter not in list	M
	TC_FT_NG1.N.16_BV_2151	Contact List - Search entries - Consecutive successful searches	M
	TC_FT_NG1.N.16_BV_3902	Line Settings List - Line id/Line name - Save entry with editable and non-editable fields	M
	TC_FT_NG1.N.16_BV_6000 (P,S)	LiA/Voice call interactions - LiA with first external outgoing voice call initiation - Audio (P=called phone, S=LiA initial slot type) **(Parameterized test)**	I
	TC_FT_NG1.N.16_BV_6003	TC_FT_NG1.N.16_BV_6000 (P= Phone A, S= Fullslot)	M
	TC_FT_NG1.N.16_BV_6006	TC_FT_NG1.N.16_BV_6000 (P= Phone C, S= Longslot)	M
	TC_FT_NG1.N.16_BV_6100 (P,S)	LiA/Voice call interactions - LiA with first external incoming voice call - Audio (P=calling phone, S=LiA initial slot type) **(Parameterized test)**	I
	TC_FT_NG1.N.16_BV_6103	TC_FT_NG1.N.16_BV_6100 (P= Phone A, S= Fullslot)	M
	TC_FT_NG1.N.16_BV_6106	TC_FT_NG1.N.16_BV_6100 (P= Phone C, S= Longslot)	M
	TC_FT_NG1.N.16_BV_7401	SMS Settings List - enabling and disabling of SMS services	C1525
	TC_FT_NG1.N.16_BV_7402	SMS Settings List - change SMSC Send Server	C1526
	TC_FT_NG1.N.16_BV_7403	SMS Settings List - change SMSC Receive Server	C1527
	TC_FT_NG1.N.16_BV_7404	SMS Settings List - change Max SMS size	C1528
	TC_FT_NG1.N.16_BV_7405	SMS Settings List - change Line id	C1529
	TC_FT_NG1.N.16_BV_7406	SMS Settings List - change SMS delivery report	C1529
	TC_FT_NG1.N.16_BV_7407	SMS Settings List - change SMS validity period	C1529

NG DECT Part 5 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	TC_FT_NG1.N.16_BV_8001	{CC-SETUP} crossing - incoming call from IUT - crossing LiA service call - incoming call restarted from IUT	M
	TC_FT_NG1.N.16_BV_8005	{CC-CONNECT}/{CC-RELEASE} crossing - LiA service call from tester - crossing incoming call from IUT - incoming call restarted	M
	NG1.N.23	**Line and diagnostic information**	M
TC_FT_NG1.N.23	TC_FT_NG1.N.23_BV_101	Line related indication - line use & handset use statuses have changed (single call mode)	M
	TC_FT_NG1.N.23_BV_102	Line related indication - line and handset use statuses have changed (single call mode, multiple lines)	M
	TC_FT_NG1.N.23_BV_103	Line related indication - line and handset use statuses have changed (multiple calls mode)	M
	TC_FT_NG1.N.23_BV_104	Indication of the same type and relating to the same line are not aggregated	M
	TC_FT_NG1.N.23_BV_105	Line related indication - PP newly attached to line	M
	TC_FT_NG1.N.23_BV_106	Line related indication - Call forwarding	M
	TC_FT_NG1.N.23_BV_107	Non-line related indication - Network error	O
	TC_FT_NG1.N.23_BV_108	Line and Diagnostic Statuses List is read-only	M
	TC_FT_NG1.N.23_BV_109	Line related indication - Location registration of a PP	M
	NG1.N.24	**Short Message Service**	O
TC_FT_NG1.N.24	TC_FT_NG1.N.24_BV_101	SMS Settings List - SMS settings are available per SMS service	M
	TC_FT_NG1.N.24_BV_102	Incoming SMS List - SMS content between FP and PPs is in UTF-8 encoding	M
	TC_FT_NG1.N.24_BV_103	List of Supported Lists - SMS lists are present in the List of Supported Lists	M
	TC_FT_NG1.N.24_BV_104	Incoming SMS List - Read selected entries	O
	TC_FT_NG1.N.24_BV_105	Incoming SMS List - SMS content between FP and PPs is in UTF-8 encoding but was received in TS 123 038 [17] format	M
	TC_FT_NG1.N.24_BV_301	Outgoing SMS List - Network side SMS encoding set to 'Unknown'	M
	TC_FT_NG1.N.24_BV_302	Outgoing SMS List - Network side SMS encoding set to default GSM 7 bit	M
	TC_FT_NG1.N.24_BV_303	Draft SMS List - Sending of SMS after PP sets the 'Sending request' field of that list	M
	TC_FT_NG1.N.24_BV_304	Outgoing SMS List - Sending of SMS within <CC.NG.03> timer	M
	TC_FT_NG1.N.24_BV_305	Outgoing SMS List - Sending of SMS after <CC.NG.03> timer expiry	M
	TC_FT_NG1.N.24_BV_306	Outgoing SMS List - Write entry (replacement)	M
	TC_FT_NG1.N.24_BV_307	Outgoing SMS List - Network side SMS encoding set to GSM 7 bit with national variants	M
	TC_FT_NG1.N.24_BV_308	Outgoing SMS List - Network side SMS encoding set to UCS-2	M
	TC_FT_NG1.N.24_BV_309	Draft SMS List -- Translation request of an outgoing SMS local encoding	M
	TC_FT_NG1.N.24_BV_310	Outgoing SMS List - Write entry (insertion)	M
	TC_FT_NG1.N.24_BV_311	Outgoing SMS List - Write entry (deletion)	M
	TC_FT_NG1.N.24_BV_401	SMS Settings List -- Default SMS Settings	M
	TC_FT_NG1.N.24_BV_601	Incoming SMS List - Notification of SMS Receipt from Network	M
	TC_FT_NG1.N.24_BV_602	Incoming SMS List - Deactivation notification	M
	TC_FT_NG1.N.24_BV_603	Incoming SMS List - SMS message waiting notification update	M
	TC_FT_NG1.N.24_BV_604	Incoming SMS List - Notification of SMS Receipt during voice call	M
	NG1.N.25	**Digital Telephone Answering Machine (DTAM)**	**O**
TC_FT_NG1.N.25	TC_FT_NG1.N.25_BV_101	DTAM Settings List -- Line-DTAM association - Create new association	M
	TC_FT_NG1.N.25_BV_102	List of supported lists - DTAM related lists are present in the list of supported lists	M
	TC_FT_NG1.N.25_BV_103	DTAM Settings List - Edit fields	C1530

NG DECT Part 5 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Status**
	TC_FT_NG1.N.25_BV_104	DTAM Incoming Messages List - Create entries -- Check entries content	M
	TC_FT_NG1.N.25_BV_200(M)	DTAM consulting call with used DTAM using method M for managing incoming messages (**Parameterized test**)	I
	TC_FT_NG1.N.25_BV_201	TC_FT_NG1.N.25_BV_200 (M=*DIRECT_CONSULTING_CALL*)	M
	TC_FT_NG1.N.25_BV_202	TC_FT_NG1.N.25_BV_200 (M= *CONSULTING_CALL_FROM_LIA*)	M
	TC_FT_NG1.N.25_BV_300(M)	DTAM consulting call with used DTAM using method M for managing welcome messages. (**Parameterized test**)	I
	TC_FT_NG1.N.25_BV_301	TC_FT_NG1.N.25_BV_300 (M=*DIRECT_CONSULTING_CALL*)	M
	TC_FT_NG1.N.25_BV_302	TC_FT_NG1.N.25_BV_300 (M= *CONSULTING_CALL_FROM_LIA*)	M
	TC_FT_NG1.N.25_BV_400	DTAM Settings list - Validate current PIN code - Save New PIN code	M
	NG1.N.26	**Call Screening**	**O**
TC_FT_NG1.N.26	TC_FT_NG1.N.26_BV_101	Call Screening Presentation and release from FP	M
	TC_FT_NG1.N.26_BV_102	Call Screening Acceptance and Interception	M
	TC_FT_NG1.N.26_BV_201	Parallel call screening rejection	M
	TC_FT_NG1.N.26_BV_202	Accept screening of waiting call	M
	TC_FT_NG1.N.26_BV_301	Call interception after call screening timeout	M
	GAP.N.1	**Outgoing call**	M
TC_FT_GAP.N.1	TC_FT_GAP.N.1_BV_101	Contact List matching in a first external outgoing call (non early CC-CONNECT implementation)	M
	TC_FT_GAP.N.1_BV_102	Contact List matching in a first external outgoing call (early CC-CONNECT implementation)	M
	GAP.N.8	**Incoming call**	
TC_FT_GAP.N.8	TC_FT_GAP.N.8_BV_101	{CC-SETUP} crossing management - incoming call from IUT - crossing voice call - incoming call restarted from IUT	M
	GAP.N.35	**Enhanced security**	M
TC_FT_GAP.N.35	TC_FT_GAP.N.35_GC_101	Verify that FT enables encryption for incoming call within timer < MM_encryption_check.1 > in case an NG DECT Part 3 PP is registered	M
	TC_FT_GAP.N.35_GC_102	Verify that FT enables encryption for outgoing call within timer < MM_encryption_ check.1 > in case an NG DECT Part 3 PP is registered	M
	GAP.N.34	**Calling Name Identification Presentation (CNIP)**	M
TC_FT_GAP.N.34	TC_FT_GAP.N.34_BV_3301	No use of empty CNIP over the air (absent CNIP instead)	M
	TC_FT_GAP.N.34_BV_3302	Contact number matching on a first incoming call	M
	NG1.A.4	**Base manual transmit power control**	M
TC_FT_NG1.A.4	TC_FT_NG1.A.4_BV_101	Base manual transmit power control - Setting of FP power level field - RSSI increase	M
	NG1.A.5	**Handset adaptive transmit power control**	M
		No test case	

C1524 IF NG1.N.16_18 "Outgoing Calls List" is NOT supported THEN "M" ELSE "I".
C1525 IF NG1.N.24 AND 'Enable SMS' is editable (FT_IXIT_40 = Supported) THEN "M ELSE "I".
C1526 IF NG1.N.24 AND SMSC Send Server is editable (FT_IXIT_41 = Supported) THEN "M" ELSE "I".
C1527 IF NG1.N.24 AND SMSC Receive Server is editable (FT_IXIT_42 = Supported) THEN "M" ELSE "I".
C1528 IF NG1.N.24 AND 'Max SMS size' is editable (FT_IXIT_43 = Supported) THEN "M" ELSE "I".
C1529 IF NG1.N.24 (Short Message Service) THEN "M" ELSE "I".
C1530 IF 'DTAM activation and timeout' is editable (FT_IXIT_51=YES) OR 'DTAM web link' is editable (FT_IXIT_52=YES) OR 'Welcome message parameters' is editable (FT_IXIT_53=YES) OR (NG1.N.26 (Screening is supported) AND 'Screening parameters' are editable (FT_IXIT_55=YES)).

6 Portable Part Test specification

This clause includes lists of the test groups relevant for a NG-DECT portable part. Test cases are ordered with network features followed by application features (TS 102 527-5 [15], clauses 6.4 and 6.9).

Descriptions of new portable part tests specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.1 TC_PT_NG1.N.1 Codec negotiation tests cases

In addition to clause 6.1 of TS 102 841 [16], the following test cases shall apply.

TC_PT_NG1.N.1_BV_105	NG DECT Part 5 capability during subscription registration
Test purpose:	-
Reference:	TS 102 527-1 [13], clause 7.4.9.1, TS 102 527-5 [15], clause 7.4.9.1. EN 300 175-5 [5], clause 7.7.41
Initial condition:	No access rights
Time sequence:	s1.1 [TS_1] Bit a44 set to 1 on TS_1 s1.2 [USR >> IUT] Start registration procedure a1 [IUT >> TS_1] {**ACCESS-RIGHTS-REQUEST**} message with an IE <<Terminal-capability>> with following capabilities declared: • "TCLw > 55 dB" in Echo parameters field (octet 3b) • "Support of NG DECT Part 3" capability in Profile indicator_7 octet (octet 4f) • "Support of NG DECT Part 5" capability in Profile indicator_7 octet (octet 4f) • "Support of 'Re-keying' and 'early encryption' " in Profile indicator_7 field (octet 4f)
Pass criteria:	Verify all answers
Comments:	The IUT may access the Internal Names List after registration and may perform all list access operations (Including: Read / Search / Save etc.)

TC_PT_NG1.N.1_BV_106	NG DECT Part 5 capability during location registration
Test purpose	-
Reference:	TS 102 527-1 [13], clause 7.4.9.1, TS 102 527-5 [15], clause 7.4.9.1 EN 300 175-5 [5], clause 7.7.41
Initial condition:	T-00
Time sequence:	s1 [USR >> IUT] Switch IUT off and on again a1 [IUT >> TS_1] {**LOCATE-REQUEST**} message with an IE <<Terminal-capability>> with following capabilities declared: • "TCLw > 55 dB" in Echo parameters field (octet 3b) • "Support of NG DECT Part 3" capability in Profile indicator_7 octet (octet 4f) • "Support of NG DECT Part 5" capability in Profile indicator_7 octet (octet 4f) • "Support of 'Re-keying' and 'early encryption' " in Profile indicator_7 field (octet 4f)
Pass criteria:	Verify all answers
Comments:	The IUT may access the Internal Names List after registration and may perform all list access operations (Including: Read / Search / Save etc.)

6.2 TC_PT_NG1.N.2 Codec switching tests cases

Clause 6.2 of TS 102 841 [16] shall apply.

6.3 TC_PT_NG1.N.3 Missed call notification tests cases

Clause 6.3 of TS 102 841 [16] shall apply.

6.4 TC_PT_NG1.N.4 Voice message waiting notification tests cases

Clause 6.4 of TS 102 841 [16] shall apply.

6.5 TC_PT_NG1.N.5 Date and time synchronization tests cases

In addition to clause 6.5 of TS 102 841 [16], the following test cases shall apply.

TC_PT_NG1.N.5_BV_103	FT Date & Time recovery - request for D&T to idle PP - **valid** PP clock
Test purpose:	When PP clock is valid, and the PP has the "Date & Time recovery" capability bit set, make sure the PP answers a request for current date/time sent by the FP
Reference: Initial condition: Time sequence:	TS 102 527-3 [14], clauses 7.4.20.3 and 7.4.2 T-00; valid IUT clock s1 [TS_1 >> IUT] {**FACILITY**} message for requesting date and time with IE <<TIME-DATE = <Time and Date, Request to send current time/date, (*no value*)> >> a1 [IUT >> TS_1] {**FACILITY**} message with IE <<TIME-DATE = <Time and Date,The current time/date, (*IUT clock value*)> >>
Pass criteria:	- Verify in a1 the *IUT clock value* format: BCD coding for Year, Month, Day, Hour, Minute, Second, TimeZone (one octet each). Example: 14/01/2009,18 h58 m 54 s, GMT is coded as '09011418585400'H - Display in a1 the *IUT clock value* received from IUT on TS_1, verify that this value corresponds to the value shown on IUT display, and confirm on TS_1 display.
Comments:	- Time validity is a flag within PP which is set to *valid* when the time is set, and set to *invalid* when some event makes the clock value necessarily wrong. - The PP is in idle state when the test starts (T-00 as initial condition), which means location registration took place at some point in time before the test is performed. - Method to check time after test might be device specific. - On some PP devices, the setting of "seconds" may differ from the sent value. - This test does not imply any FP reboot. - If it appears the PP clock was invalid when performing the test a first time (the PP behaving as in BV_104), the PP user may set the clock on IUT (to any time) in order to ensure PP clock validity. As a consequence, IUT might access the Line Settings List in order to check the 'clockmaster' setting and allow this operation. This setting shall be set to 'PP'.

TC_PT_NG1.N.5_BV_104	FT Date & Time recovery - request for D&T after first locate request - **invalid** PP clock
Test purpose:	While PP clock is invalid (after PP reboot or batteries removal), and the PP has the "Date & Time recovery" capability bit set, make sure the PP answers a request for current date/time from FP with "No date/time available"
Reference:	TS 102 527-3 [14], clauses 7.4.20.3 and 7.4.2
Initial condition:	T-00, invalid IUT clock (reboot or batteries removal) and just completed location registration
Time sequence:	s1 [TS_1 >> IUT] {**FACILITY**} message for requesting date and time with IE <<TIME-DATE = <Time and Date, Request to send current time/date, (*no value*)> >> a1 [IUT >> TS_1] {**FACILITY**} message with IE <<TIME-DATE = <Time and Date, No valid time/date available, (*no value*)> >>
Pass criteria:	Verify answer a1
Comments:	- Time validity is a flag within PP which is set to *valid* when the time is set, and set to *invalid* when some event makes the clock value necessarily wrong - An IUT compliant with clause 7.4.20.3 ("FT date and time recovery") also answers before location registration - in case the PP uses a real time clock, it might be necessary to remove and insert again the batteries of the IUT in order to get an invalid IUT clock in initial conditions

6.6 TC_PT_NG1.N.6 Parallel calls tests cases

Clause 6.6 of TS 102 841 [16] shall apply.

6.7 TC_PT_NG1.N.7 Common parallel call procedures tests cases

In addition to clause 6.7 of TS 102 841 [16], the following test cases shall apply.

TC_PT_NG1.N.7_BV_3201	Outgoing parallel external call initiation with Contact List matching	
Test purpose:	Check that the PP correctly handles the <<CALLED PARTY NAME>> IE (including display)	
Reference:	TS 102 527-3 [14], clause 7.4.3.5.1; TS 102 527-5 [15], clause 7.4.32	
Initial condition:	External call in T-10 (IUT+TS_1) initiated by IUT on line 0 (call id a) Contact List in the FP as defined in clause 4.1.1.1.6 [15]	
Time sequence:	s1 [USR >> IUT]	Initiate outgoing parallel call on line 0 towards "0490413002" number
	a1 [IUT >> TS_1]	{**CC-INFO**} message with - (**2.1**) IEs <<MULTI-KEYPAD>> set to 1CH 15H and s0 = "0490413002" digits and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.2**) IEs <<MULTI-KEYPAD>> set to 1CH 15H and s0 digits such that s0 is a (possibly empty) leading substring of "049041300" and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.3**) IE <<MULTI-KEYPAD>> set to 1CH 15H digits
	a2 [IUT >> TS_1]	(**cases 2.2 & 2.3 only**), one or several {CC-INFO} such that: - (**2.3 only**) first {**CC-INFO**} message shall contain an IE <<CALL-INFORMATION>> specifying (line 0, call id b) =<(0, 0, 0), (1, 0, value b)> - all {**CC-INFO**} messages shall contain an IE <<MULTI-KEYPAD>> set to (non-empty) si digits (i≥1), except perhaps the first {**CC-INFO**} in case 2.3 (so that s1 may be the empty string in that case) - the concatenation of si (i ≥ 0) (including s0 received in step 1) shall match "0490413002" - each {CC-INFO} shall contain (call id b) =<(1, 0, value b)>
	s3 [TS_1 >> IUT]	(**case 2.3 only**) {**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id b) =<(0, 0, 0), (0, 5, 1), (1, 0, value b)> (**cases 2.2 & 2.3**), {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call proc) =<(1, 0, value b), (2, 1, 3)> and (*first possible position*) IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'User provided', <Called party name> = 'FENJIRO' and <Called party firstname> = 'Carlos'. (**in all cases**), {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call connect) =<(1, 0, value b),(2, 1, 5)>
	a3 [TS_1 <> IUT]	End-to-end U-plane connection
Pass criteria:	Verify all answers In a1, case 2.2, the leading substring shall not contain the final digit of the telephone number. It is therefore a substring of "049041300" (tel number without the last digit). See also "Comments" section for the definition of a substring. In a2, and in case there is no <<MULTI-KEYPAD>> IE in the message, substring s1 shall still be defined, but as the empty string. After a3, verify that the <<CALLED PARTY NAME>> is correctly handled by the PP.	
Comments:	In this test case, the notion of substring does not exclude trivial substrings (i.e. it may be the empty string, or the whole string).	

TC_PT_NG1.N.7_BV_3202	Outgoing parallel external call initiation with contact provision by network	
Test purpose:	Check that the PP correctly handles the <<CALLED PARTY NAME>> and <<CALLED PARTY NUMBER>> IEs (including display)	
Reference:	TS 102 527-3 [14], clause 7.4.3.5.1; TS 102 527-5 [15], clause 7.4.32	
Initial condition:	External call in T-10 (IUT+TS_1) initiated by IUT on line 0 (call id a) Contact List in the FP as defined in clause 4.1.1.1.6 [15]	
Time sequence:	s1 [USR >> IUT]	Initiate outgoing parallel call on line 0 towards "0123456789" number
	a1 [IUT >> TS_1]	{**CC-INFO**} message with - (**2.1**) IEs <<MULTI-KEYPAD>> set to 1CH 15H and s0 = "0123456789" digits and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.2**) IEs <<MULTI-KEYPAD>> set to 1CH 15H and s0 digits such that s0 is a (possibly empty) leading substring of "012345678" and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.3**) IE <<MULTI-KEYPAD>> set to 1CH 15H digits
	s2 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call hold) =<(1, 0, value a), (2, 1, 9)> (**case 2.1)** {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id b) =<(0, 0, 0), (0, 5, 1), (1, 0, value b)> followed by a {CC-INFO} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call proc) =<(1, 0, value b), (2, 1, 3)>and IE <<CALLED PARTY NUMBER>> with <Number Type>='Unknown', <Numbering plan identification> = 'Unknown', and <Called party address> = '0123456789', and IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'Network provided', <Called party name> = 'JOHNSON' and <Called party firstname> = 'Tim'. (**case 2.2**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id b, CS call setup ack) =<(0, 0, 0), (0, 5, 1), (1, 0, value b), (2, 1, 2)> (**case 2.3**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call setup ack) =<(1, 0, value b), (2, 1, 2)>
	a2 [IUT >> TS_1]	(**cases 2.2 & 2.3 only**), one or several {**CC-INFO**} such that: - (**2.3 only**) first {**CC-INFO**} message shall contain an IE <<CALL-INFORMATION>> specifying (line 0, call id b) =<(0, 0, 0), (1, 0, value b)> - all {**CC-INFO**} messages shall contain an IE <<MULTI-KEYPAD>> set to (non-empty) si digits (i≥1), except perhaps the first {CC-INFO} in case 2.3 (so that s1 may be the empty string in that case) - the concatenation of si (i ≥ 0) (including s0 received in step 1) shall match "0123456789" - each {**CC-INFO**} shall contain (call id b) =<(1, 0, value b)>
	s3 [TS_1 >> IUT]	(**case 2.3 only**) {**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id b) =<(0, 0, 0), (0, 5, 1), (1, 0, value b)> (**cases 2.2 & 2.3**), {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call proc) =<(1, 0, value b), (2, 1, 3)> and IE <<CALLED PARTY NUMBER>> with <Number Type>='Unknown', <Numbering plan identification> = 'Unknown', and <Called party address> = '9876543210', and IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'Network provided', <Called party name> = 'JOHNSON' and <Called party firstname> = 'Tim'. (**in all cases**), {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call connect) =<(1, 0, value b),(2, 1, 5)>
	a3 [TS_1 <> IUT]	End-to-end U-plane connection
Pass criteria:	Verify all answers In a1, case 2.2, the leading substring shall not contain the final digit of the telephone number. It is therefore a substring of "049041300" (tel number without the last digit). See also "Comments" section for the definition of a substring. In a2, and in case there is no <<MULTI-KEYPAD>> IE in the message, substring s1 shall still be defined, but as the empty string. After a3, verify that the <<CALLED PARTY NAME>> and <<CALLED PARTY NUMBER>> are correctly handled by the PP.	
Comments:	In this test case, the notion of substring does not exclude trivial substrings (i.e. it may be the empty string, or the whole string).	

6.8 TC_PT_NG1.N.8 Call transfer tests cases

Clause 6.8 of TS 102 841 [16] shall apply.

6.9 TC_PT_NG1.N.9 3-party conference with established external and/or internal calls tests cases

Clause 6.9 of TS 102 841 [16] shall apply.

6.10 TC_PT_NG1.N.10 Intrusion call tests cases

Clause 6.10 of TS 102 841 [16] shall apply.

6.11 TC_PT_NG1.N.11 Call deflection (external or internal) tests cases

Clause 6.11 of TS 102 841 [16] shall apply.

6.12 TC_PT_NG1.N.12 Line identification tests cases

Clause 6.12 of TS 102 841 [16] shall apply.

6.13 TC_PT_NG1.N.13 Call identification tests cases

Clause 6.13 of TS 102 841 [16] shall apply.

6.14 TC_PT_NG1.N.14 Multiple lines tests cases

Clause 6.14 of TS 102 841 [16] shall apply.

6.15 TC_PT_NG1.N.15 Multiple calls tests cases

Clause 6.15 of TS 102 841 [16] shall apply.

6.16 TC_PT_NG1.N.16 List access service tests cases

The objective of this subgroup is the same as stated in TS 102 841 [16], clause 6.16. In addition to clause 6.16 in TS 102 841 [16] the following shall apply:

Test equipment implementation requirements for List access service tests cases

See TS 102 841 [16], clause 6.16.

Test equipment implementation requirements for 'DECT System Settings List' and 'List of Supported Lists'

See TS 102 841 [16], clause 6.16.

Test equipment implementation requirements for call lists and Contact Lists

See TS 102 841 [16], clause 6.16.

Multiple instances of the 'contact number' field in the Contact List (see also TS 102 527-3 [14], clause 7.4.10.1, 'Field instances management' clause)

See TS 102 841 [16] clause 6.16.

Handling of the line name and line id fields in list access in test cases

See TS 102 841 [16] clause 6.16.

Test equipment implementation requirements for PIN protected lists (DECT system setting, Line setting, or Internal names)

See TS 102 841 [16] clause 6.16.

Test equipment implementation requirements regarding entry identifiers

An entry identifier is a unique identifier associated with a list entry. An entry identifier need only be unique within a given FP list, so entry identifiers for different entries need not be correlated in any way.

In order to check that the PP is able to work with any entry identifiers, and in particular in order to detect PPs confusing entry identifiers with entry indices, the tester shall always use "unpredictable" entry identifier values.

Declarations (see annex A)

This part refers to annex A in TS 102 841 [16].

TC_PT_NG1.N.16_BV_1706	Missed Calls List - Initiate incoming call - Consult Missed Calls Log - Initiate outgoing call from log	
Test purpose:	Verify that PP supports outgoing call setup from LiA just after incoming call release - Initiate incoming call from Phone A and hang up - Open the missed calls log - Initiate outgoing call from LiA session towards Phone A using first (new) entry	
Reference:	TS 102 527-3 [14], clause 7.4.10.6.2	
Initial condition:	T-00 IUT does not use All Calls List as data source for call logs (PT_IXIT_11=NO) N=number of calls in the Missed Calls List at test start	
Time sequence:		
	s1.1 [USR >> Ph A]	**Initiate incoming call towards TS_1 from Phone A**
	s1.2 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	a1 [IUT >> TS_1]	{**CC-ALERTING**}
	s2.1 [TS_1>> IUT]	{**CC-RELEASE**} message
	s2.2 [TS_1]	Missed call added to Missed Calls List and All Calls List
	a2 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s3.1 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <Missed call, A new external missed voice call just arrived, 1> (=<01H,81H,81H>) - <List change indication, Missed calls list, N+1> (=<03H,81H,N+1>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s3.2 [TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, All Calls List, don't care value>(=<03H,84H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s3.3 [TS_1]	*User invited to open Missed calls log and to press "Y" when done*
	s3.4 [USR >> IUT]	**Open the Missed calls log**.
	s3.5 [USR >> TS_1]	(*immediately*) **Press "Y"**
	s3.6 [TS_1]	Timer T2 started, with timeout = <CC.NG.04>
	a3.1 [IUT >> TS_1]	**Start in parallel a3.2 .. s9 and a9 .. a12**.
		LiA session with Missed Calls List
	a3.2 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s4 [TS_1 >> IUT]	{**CC-CALL-PROC**}

a4	[IUT >> TS_1]	<**Start session**, List identifier = 01H, nb of sorting fields =n>
s5	[TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=N+1, discriminator type=0, nb of sorting fields =1,sorting field id1 =3>
a5	[IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
s6	[TS_1 >> IUT]	(**if requested**) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 04H (Read status) - non-editable fields: 01H 02H 03H 05H 06H 07H
a6	[IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, mark entries request= don't care value, list entry field id 1..n = at least 01H, 02H, 03H, 07H>
s7	[TS_1 >> IUT]	<**Read entries confirm**, session id=1> followed by <data packet/data packet last> with Phone A number
a7	[IUT >> TS_1]	(*Optional*) <**End session**, session id=1>
s8	[TS_1 >> IUT]	(*If End session*) <**End session confirm**, session id=m>
a8	[IUT >> TS_1]	(*Optional*) {**CC-RELEASE**} message
s9	[TS_1 >> IUT]	(*If a8 present*) {**CC-RELEASE-COM**} message
		End of LiA session
		Missed calls log display and outgoing call initiation
a9	[IUT >> USR]	(*before T2 expiry, whether PP uses caching or not*) Incoming call from PhA is displayed in missed calls log.
s10	[USR >> IUT]	**Outgoing call to Phone A from Missed calls logs**
a10	[IUT >> TS_1]	**IF** *a8 not received, i.e. if LiA session is still open*: a10.1 (*Pseudo outgoing parallel call*) {CC-INFO} message with - IE <<MULTI-KEYPAD>> set to 1C15H and Phone A number, - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> or (None) = <(0,0,127)> **ELSE IF** *a8/s9 already performed, i.e. if LiA session closed*: a10.2 (*first outgoing call*) {**CC-SETUP**} message with IEs <<BASIC-SERVICE>> 'Normal call setup' and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> {**CC-INFO**} message with - IE <<MULTI-KEYPAD>> set to Phone A number, - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> or (None) = <(0,0,127)>
s11.1	[TS_1 >> IUT]	(**Connect outgoing call to Phone A**, whether *session still ongoing or not; =early CC-CONNECT if LiA session closed*) {**CC-CONNECT**} message with: (*if not sent before*) <<CODEC-LIST>> IE
s11.2	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> with: (line 0, **full VoIP line type information**, call id b) =<(0, 0, 0), (0, 5, 1), (1, 0, value b)>
s11.3	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> with: (call id b, **CS call proc**) = <(1, 0, value b), (2, 1, 3)>
s11.4	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> with: (call id b, **CS call alerting**) = <(1, 0, value b), (2, 1, 4)>
s11.5	[USR >> PhA]	**Pick up call**
s11.6	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> with: (call id b, **CS call connect**) = <(1, 0, value b), (2, 1, 5)>
a11	[IUT <> Ph A]	G.722 end to end connection
s12	[TS_1 >> IUT]	{**CC-RELEASE**} message
a12	[IUT >> IUT]	{**CC-RELEASE-COM**} message
s13.1	[TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, All Calls List, don't care value>(=<03H,84H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
s13.2	[TS_1 >> IUT]	(IF NG1.N.16_18 "Outgoing Calls List" is supported) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, Outgoing Calls List, don't care value>(=<03H,82H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
		End of test case

Pass criteria:	Verify all answers
Comments:	- This TC distinguishes the notion of *call log* (local MMI item) from the notion of *call list* (FP located item). If IUT does not use caching, both items are accessed synchronously, otherwise asynchronously. - In s3.1 and s3.2, the sent notification takes the form of a full resync request (with no <<LIST CHANGE DETAILS>> IE) even if IUT declares support of extended list change notification. - in a3.2 LiA service call is started either as a result of s3.1 (if PP uses caching) or as a result of s3.4 (if PP does not use caching, or uses caching but defers syncing operation). Whatever caching policy the IUT uses, a3.2 .. s9 shall include retrieval (and display to the user) of the new incoming call entry within timer T2 after log opening. - a9 is not the answer to s9, as a9 begins a parallel sequence started in a3.1. - From a3.1 on, the tester shall allow sequence a9 .. a12 to be interleaved with sequence a3.2 .. s8, with however the following constraints: - a9 can only be verified after a5 (with start index 1) and s6 have been processed. - Version a10.1 of a10 is used if a8 was not received before. - Version a10.2 of a10 is used if a8 was received (and s9 returned) before. - In a5/s6 IUT may use additional instances of the Read entries command. - Test case ends when s13.2 is reached.

TC_PT_NG1.N.16_BV_1750	Missed Calls List - Read entries - Partial delivery	
Test purpose:	Test that PP correctly handles the partial delivery bit when set. *Partial delivery* allows the FP to answer a PP request for too many entries with a subset of these entries (instead of answering with an error)	
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6	
Initial condition:	All calls test list content (see clause 4.1.1.1.5) FP does not implement the NG1.N.16_26 "Virtual Contact List and call list per line" procedure	
	T-00	
Time sequence:	s1 [USR >> IUT]	Open the **Missed Calls List**.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 01H, nb of sorting fields =n (n ≥ 0) followed by n sorting field identifiers among 01H, 02H, 03H, 04H, 05H, 06H, 07H>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=30, discriminator type=0, nb of sorting fields =1,sorting field id1 =3>
	a3 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=don't care, counter= i, mark entries request= don't care value, list entry field identifier 1..n = some or all identifiers among 01H, 02H, 03H, 04H, 05H, 06H, 07H>
	s4.1 [TS_1 >> IUT]	For each <Read entries> received: - **if (i=1)** <**Read entries confirm**, session id=1, **partial delivery=0**>, followed by <data packet/data packet last> with the entry of index s - **if (i≥2)** (**first time**) <**Read entries confirm**, session id=1, **partial delivery=1**>, followed by <data packet/data packet last> with a number of entries equal to i-1, from s start index, and in the requested direction. - **if (i≥2)** (**next times**) <**Read entries confirm**, session id=1, **partial delivery=0**>, followed by <data packet/data packet last> with a number of entries equal to i, from s start index, and in the requested direction.
	s4.2 [USR >> IUT]	Browse into the list on IUT from the newest call to the oldest one.
	a4 [IUT >> USR]	For each entry read: entry content is displayed on IUT in the correct sequence from the newest call to the oldest one
	s5 [USR >> IUT]	Hang up on IUT
	a5 [IUT >> TS_1]	{**CC-RELEASE**} message
	s6 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers. - Verify that the non-delivered entry in s4.1 when i ≥ 2 (first time) is requested again in the next use of the 'Read entries' command in a3.	
Comments:	- The tester sets the 'partial delivery' bit to '1' only once in the session (i.e. the first time IUT requests more than one entry at once). - If the PP never requests more than one entry in all uses of the 'Read entries' command in a3, it is assumed that the PP never requests more than one entry at a time for this list and the test therefore succeeds (because such a PP does not need to support partial delivery for that list).	

TC_PT_NG1.N.16_BV_1804	Outgoing Calls List - Start session rejection because list is not implemented on FP side.
Test purpose:	Test if PP can handle rejection from FP when the optional list is not implemented on FP
Reference: Initial condition: Time sequence:	TS 102 527-3 [14], clause 7.4.10.4.1 1 PPs registered (TS_1 is NG PP1) FP(Tester) does not implement "Outgoing Calls List" The PP should access the Outgoing Calls List on the FP T-00 s1 [USR >> IUT] Open the Outgoing Calls List a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id = 01H, nb of sorting fields = n (n ≥ 0) followed by n sorting field ids among 01H, 02H, 03H, 05H> s3 [TS_1 >> IUT] <**Start session confirm**, session id=0, Start **session reject reason= list not supported**> a3 [IUT >> TS_1] {**CC-RELEASE**} message s4 [TS_1 >> IUT] {**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers

TC_PT_NG1.N.16_BV_2004	All Calls List - Initiate outgoing call - Consult All Calls Log - Initiate new outgoing call from log	
Test purpose:	Verify that PP supports outgoing call setup from log consultation (implying LiA session) just after outgoing call release: - Initiate outgoing call towards Phone A and hang up - Open the All calls log - Initiate outgoing call from log towards Phone A using first (new) entry	
Reference:	TS 102 527-3 [14], clause 7.4.10.6.2	
Initial condition:	IUT uses All Calls List as data source for call logs (PT_IXIT_11=YES) M=number of calls in the All Calls List at test start T-00	
Time sequence:	s1 [USR >> IUT]	**Initiate outgoing call towards Phone A**
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with: - (2.1) None - (2.2) IEs <<BASIC-SERVICE>> 'Normal call setup' and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (2.3) IE<<BASIC-SERVICE>> 'Normal call setup' (*alone*)
	s2.1 [TS_1 >> IUT]	(*answer with early CC-CONNECT*) {**CC-CONNECT**} with IE <<CALL-INFORMATION>> specifying: (call id a) =<(1, 0, value a)>, and: - (2.2) (line 0, full VoIP line type info) =<(0, 0, 0), (0, 5, 1)> - (2.3) *nothing*
	s2.2 [TS_1 >> IUT]	{**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)>
	a2 [IUT >> TS_1]	{**CC-INFO**} message with: - (*optional for 2.3*) IE <<MULTI-KEYPAD>> set to a *non-empty* leading substring s_0 of Phone A number (possibly the whole number), and - IE <<CALL-INFORMATION>> with: - (2.2) (call id a) =<(1, 0, value a)> - (2.3) (line 0, call id a) =<(0, 0, 0), (1, 0, value a)>
	s3 [TS_1 >> IUT]	(2.3 only) {**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a)> and (line 0, full VoIP line type info) =<(0, 0, 0), (0, 5, 1)>
	a3.1 [IUT >> TS_1]	(*use first time with i=1*) {**CC-INFO**} messages with IE <<MULTI-KEYPAD>> set to a *non-empty* substring s_i of Phone A number
	a3.2 [TS_1]	(*if* $(s_0 + s_1 + \ldots + s_i \neq$ *Phone A number*) go back to a3.1
	s4.1 [TS_1 >> IUT]	{**CC-CALL-PROC**}
	s4.2 [TS_1 >> IUT]	{**CC-ALERTING**}
	s4.3 [TS_1 >> IUT]	{**CC-RELEASE**}
	s4.4 [TS_1]	Outgoing call added to All Calls List
	a4 [IUT >> TS_1]	{**CC-RELEASE-COM**}
	s5.1 [TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, All Calls List, M+1> (=<03H,84H,M+1>) and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s5.2 [TS_1 >> IUT]	(*Tester supports* NG1.N.16_18 "Outgoing Calls List") {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, Outgoing Calls List, don't care value>(=<03H,82H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s5.3 [TS_1]	*User invited to open (All) calls log and to press "Y" when done*
	s5.4 [USR >> IUT]	**Open the Outgoing Calls (or All Calls) Log**
	s5.5 [USR >> TS_1]	(*immediately*) **Press "Y"**
	s5.6 [TS_1]	Timer T2 started, with timeout = <CC.NG.04>
	a5.1 [IUT >> TS_1]	**Start in parallel a5.2 .. s11.and a11 .. a13**
		LiA session with All Calls List

a5.2	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
s6	[TS_1 >> IUT]	{**CC-CALL-PROC**}
a6	[IUT >> TS_1]	<**Start session**, List identifier = 04H, nb of sorting fields =n>
s7	[TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=M+1, discriminator type=0, nb of sorting fields =1,sorting field id1 =4>
a7	[IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
s8	[TS_1 >> IUT]	(**if requested**) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 07H (Read status) - non-editable fields: 01H 02H 03H 04H 05H 06H 08H
a8	[IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, mark entries request= don't care value, list entry field id 1..n = at least 01H, 02H, 03H, 04H>
s9	[TS_1 >> IUT]	<**Read entries confirm**, session id=1> followed by <data packet/data packet last> with Phone A number
a9	[IUT >> TS_1]	(*Optional*) <**End session**, session id=1>
s10	[TS_1 >> IUT]	(*If End session*) <**End session confirm**, session id=1>
a10	[IUT >> TS_1]	(*Optional*) {**CC-RELEASE**} message
s11	[TS_1 >> IUT]	(*If a10 present*) {**CC-RELEASE-COM**} message **End of LiA session** (All) c**alls log display and new outgoing call initiation**
a11	[IUT >> USR]	(*before T2 expiry whether PP uses caching or not*) Outgoing call to Phone A displayed in (all) calls log.
s12	[USR >> IUT]	**Outgoing call to Phone A from (All) calls logs**
a12	[IUT >> TS_1]	IF *a10 not received, i.e. if LiA session is still open*: a12.1 (*Pseudo outgoing parallel call*) {CC-INFO} message with - IE <<MULTI-KEYPAD>> set to 1C15H and Phone A number, - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> or (None) = <(0,0,127)> ELSE If*a10/s11 already performed, i.e. LiA session closed*: a12.2 (*first outgoing call*) {**CC-SETUP**} message with IEs <<BASIC-SERVICE>> 'Normal call setup' and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> {**CC-INFO**} message with - IE <<MULTI-KEYPAD>> set to Phone A number, - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> or (None) = <(0,0,127)>
s13.1	[TS_1 >> IUT]	(**Connect outgoing call to Phone A**, whether *session still ongoing or not; =early CC-CONNECT if LiA session closed*) {**CC-CONNECT**} message with: - (*if not sent before*) <<CODEC-LIST>>
s13.2	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, **full VoIP line type information**, call id b) =<(0, 0, 0), (0, 5, 1), (1, 0, value b)>
s13.3	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, **CS call proc**)=<(1, 0, value b), (2, 1, 3)>
s13.4	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, **CS call alerting**)=<(1, 0, value b), (2, 1, 4)>
s13.5	[USR >> PhA]	**Pick up call**
s13.6	[TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, **CS call connect**)=<(1, 0, value b), (2, 1, 5)>
a13	[IUT <> Ph A]	G.722 end to end connection
s14	[TS_1 >> IUT]	{**CC-RELEASE**} message
a14	[IUT >> IUT]	{**CC-RELEASE-COM**} message
s15.1	[TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change indication, All Calls List, M+2> (=<03H,84H,M+2>) and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
s15.2	[TS_1 >> IUT]	(*Tester supports* NG1.N.16_18 "Outgoing Calls List") {**FACILITY**} message with:

	- IE <<EVENTS NOTIFICATION>> with: - <List change indication, Outgoing Calls List, don't care value>(=<03H,82H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)> **End of test case**
Pass criteria:	Verify all answers
Comments:	- This TC distinguishes the notion of *call log* (local MMI item) from the notion of *call list* (FP located item). If IUT does not use caching, both items are accessed synchronously, otherwise asynchronously. - In a2, in case 2.3, s0 is set to "" (empty string) if <<MULTI-KEYPAD>> IE is absent. - In s5.1 and s5.2, the sent notifications take the form of a full resync request (with no <<LIST CHANGE DETAILS>> IE) even if IUT declares support of extended list change notification. - in a5.2 LiA service call is started either as a result of s5.1 (if PP uses caching) or as a result of s5.4 (if PP does not use caching, or uses caching but defers syncing operation). Whatever caching policy the IUT uses, a5.2 .. s11 shall include retrieval (and display to the user) of the new outgoing call entry within timer T2 after log opening. - In a8 IUT (Part 5 PP) could request fields 01H to 08H of the Part 5 FP All Calls List. - a11 is not the answer to s11 as a11 begins a parallel sequence started in a5.1. - From a5.1 on, the tester shall allow sequence a11 .. a13 to be interleaved with sequence a5.2 .. a10, with however the following constraints: - a11 can only be verified after a8 (with start index 1) and s9 have been processed - Version a12.1 of a12 is used if a10 was not received before - Version a12.2 of a12 is used if a10 was received (and s11 returned) before - In a8/s9 IUT may use additional instances of the Read entries command. - In s15.1, assumption is that tester does not merge the 2 outgoing calls to Phone A - Test case ends when s15.2 is reached.

TC_PT_NG1.N.16_BV_2005	Missed calls (or All calls) log - Transfer (missed call) number from call log to phonebook		
Test purpose:	Test if PP is able to transfer missed call number into a new entry of the contact list, possibly involving two LiA sessions 1- Optional read-only LiA session with the list used as data source for the log (=LI). Should not occur if IUT caches the list LI 2- Perform number transferring into the phonebook 3- Optional closing of LiA service call (could be kept open if used) 4- LiA service call re-opened (If closed) 5- LiA session with contact list opened in order to create the new entry (always, because a modification is made in the phonebook) 6- Close the list access service call		
Reference:	TS 102 527-3 [14], clause 7.4.10.5.3		
Initial condition:	Test content for All Calls List (clause 4.1.1.1.5) and Contact List (clause 4.1.1.1.6) IUT is NG PP1, TS_1 is NG FP F0 = {'Number', 'Name', 'Date and Time', 'Read status', 'Line name', 'Line id', 'Number of calls'} IF PT_IXIT_11=YES (i.e. IUT uses "All Calls List" as data source) THEN LI='**All Calls List**', FIDS = F0 ∪ {'Call type'}, NB=30 ELSE LI='**Missed Calls List**', FIDS = F0, NB=10 T-00		
Time sequence:	s1	[USR >> IUT]	**Open the [All or Missed] Calls Log**.
			1- Optional LiA session with list LI (a1 to a4)
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2	[IUT >> TS_1]	<**Start session**, List id=LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field identifiers among FIDS>
	s3	[TS_1 >> IUT]	<**Start session confirm**, session id=4, total nb=30, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Date and Time>
	a3	[IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
	s4	[TS_1 >> IUT]	(**if requested**) < **Query supported entry fields confirm**, session id=4> with: - editable fields: 'Read status' - non-editable fields: FIDS \ {'Read status'}
	a4	[IUT >> TS_1]	<**Read entries**, session id=4, start index=s, direction=0, counter= i, mark entries request= (00H, 7FH, or FFH), list entry field ids 1..n=some or all ids among FIDS>
	s5	[TS_1 >> IUT]	<**Read entries confirm**, session id=4>, followed by <**data packet/data packet last**> with the number i of requested entries
	a5	[IUT]	"JENDREZEJZAK" entry content displayed on IUT
			2- Perform number transferring into the phonebook
	s6	[USR >> IUT]	Select "JENDREZEJZAK" entry and use the MMI in order to save it in the phonebook (entry can be selected using the number "497312456897")
			3- Optional closing of LiA service call (from a5.1 to a5.2)
	a6	[IUT >> TS_1]	<**End session**, session id=4>
	s7	[TS_1 >> IUT]	(*If <End session>*) <**End session confirm**, session id=5>
	a7	[IUT >> TS_1]	{**CC-RELEASE**} message
	s8	[TS_1 >> IUT]	{**CC-RELEASE-COM**} message
			4- LiA service call re-opened (If closed)
	a8	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s9	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
			5- LiA session with contact list opened (always) in order to create the new entry
	a9	[IUT >> TS_1]	<**Start session**, List id=LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field ids among 01H 02H 03H (04H) 05H >
	s10	[TS_1 >> IUT]	<**Start session confirm**, session id=5, total nb=10, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	a10	[IUT >> TS_1]	<**Save entry**, session id=5, entry id=00H> followed by <**data packet/data packet last**> set to: - Name= JENDREZEJZAK, - First name= null or possible edited value, - Contact number1 = "497312456897" - (**optional**) Associated melody= one octet value

		- (**optional**) "Line Id" with one of the following values: - (3, 0) 'Related to' with line id 0 - (3, 1) 'Related to' with line id 1 - (4) "All lines"
	s11.1 [TS_1 >> IUT]	<**Save entry confirm**, session id=5, entry id= identifier value of created entry, position index=7, total nb of available entries= 11>
	s11.2 [USR >> IUT]	6- Close the list access service call
	a11 [IUT >> TS_1]	(**optional**) <**End session**, session id=5>
	s12 [TS_1 >> IUT]	(If <End session>) <**End session confirm**, session id=5>
	a12 [IUT >> TS_1]	(**optional**) <**End session**, session id=4>
	s13 [TS_1 >> IUT]	(If <End session>) <**End session confirm**, session id=4>
	a13 [IUT >> TS_1]	{**CC-RELEASE**} message
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a14 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - addition, entry id = ' JENDREZEJZAK' entry id, position indicator = entry id of FENJIRO Carlos entry - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Contact List' and - event multiplicity = 10 - IE << CALL INFORMATION>> with the value received in a10, that is, either (3,0), (3,1) or (4).
Pass criteria:	Verify all answers	
Comments:	At s6, after selecting the "JENDREZEJZAK" entry, some IUT can re-read the entry At a7..s8.1, IUT shall update the contact list in real time even if IUT uses caching (see 7.4.10.1, Notifications and caching) because interaction includes a list modification At a9, IUT may handle the optional field identifier 04H (associated melody) in contact list entries ('start session', 'read entries' and 'save entry' commands of the current test case). Test case shall not fail because of this This test is similar to TC_PT_NG1.N.16_BV_1704 except that the PT may use the All Calls List instead of the Missed Calls List.	

TC_PT_NG1.N.16_BV_2006	Incoming accepted calls (or All calls) log - Incoming first voice call during existing list access session	
Test purpose:	1-List access with list used as data source for incoming accepted calls Incoming accepted call deleted (in order to ensure LiA access) 2- First incoming call presented during LiA service call (pseudo waiting call) 3- Incoming call accepted from IUT 4- Hang up on IUT. Notifications for the new incoming call received	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.3, 7.4.10.5.6 and 7.4.10.6.3	
Initial condition:	Test content for Missed Calls List (clause 4.1.1.1.2) and All Calls List (clause 4.1.1.1.5) IUT is NG PP1, TS_1 is NG FP F1 = {'Number', 'Name', 'Date and Time', 'Line name', 'Line id'} IF PT_IXIT_11=YES (i.e. IUT uses "All Calls List" as data source) THEN LI='**All Calls List**, FIDS=F1 ∪ {'Call type','Read status','Number of calls'}, NB=30 ELSE LI='**Incoming Accepted Calls List**' FIDS = F1, NB=10 T-00	
Time sequence:	s1 [USR >> IUT]	**Open the [All or Incoming Accepted] Calls log**
	a1.1 [IUT >> USR]	(If PP caches LI; cf. PT_IXIT_15 or PT_IXIT_14) Some entries displayed.
		1- LiA session required at least in order to perform entry deletion
	a1.2 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
		LiA session with list LI (see initial conditions)
	a2 [IUT >> TS_1]	<**Start session**, List id=LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field identifiers among FIDS >
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=4, total nb=NB, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Date and Time'>
	a3 [IUT >> TS_1]	(*optional*) <**Query supported entry fields**>
	s4 [TS_1 >> IUT]	(*if requested*) < **Query supported entry fields confirm**, session id=4> with: - editable fields: 'Read status' - non-editable fields: FIDS \ {'Read status'}
		(If PP does not cache LI; cf. PT_IXIT_15 or PT_IXIT_14)
	a4 [IUT >> TS_1]	<**Read entries**, session id=4, start index=s, direction=0, counter= i, mark entries request= (00H, 7FH, or FFH), list entry field identifier 1..n = some or all identifiers among FIDS>
	s5 [TS_1 >> IUT]	For each <Read entries> received: - <**Read entries confirm**, session id=4>, followed by <**data packet/data packet last**> with the number i of requested entries
	a5.1 [IUT >> USR]	Some entries displayed.
	a5.2 [IUT >> TS_1]	<**Delete entry**, session id=4, entry id = 'entry id of incoming accepted call with J. LAGADEC' >
		2- First incoming call presented during LiA service call
	s6.1 [TS_1 >> IUT]	{**CC-CONNECT**} message
	s6.2 [TS_1 >> IUT]	<**Delete entry confirm**, session id=4, total nb of available entries=29>
	s6.3 [TS_1 >> IUT]	{**CC-INFO**} message with: - IE <<**SIGNAL**>> with value 07H indicating 'call waiting tone on' - IE <<**CALL-INFORMATION**>> with (line 0, full VoIP line type info, call id a, CS call setup) =<(0, 0, 0), (0, 5, 1), (1, 0, value a), (2, 1, 1)>
	s6.4 [TS_1 >> IUT]	{**CC-INFO**} message with: - IE <<**CALLING PARTY NUMBER** = <International number, Unknown, '44123456789'> >> - IE <<**CALL-INFORMATION**>> with (call id a) =<(1, 0, value a)>
	a6.1 [IUT >> USR]	Incoming call displayed to the user: - either by indicating the call waiting to the receiving user (generating a CW tone and stopping the generation by itself) - or by ringing as for an incoming first call (and then stop the ringing by itself)

	a6.2 [IUT >> USR]	CLIP presentation according to IUT display capabilities
	s7.1 [TS_1 >> IUT]	(*If* <*End session*>) <**End session confirm**, session id=4>
	s7.2 [USR >> IUT]	3- Accept incoming call
	a7 [IUT >> TS_1]	{**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to (1CH, 35H) digits - IE <<CALL-INFORMATION>> with (call id a) =<(1, 0, value a)>
	s8 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a8 [IUT <> TS_1]	End-to-end U-plane connection
	s9 [USR >> IUT]	4 - Hang up on IUT
	a9 [IUT >> TS_1]	{**CC-RELEASE**} message
	s10.1 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	s10.2 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - deletion, entry id = 'entry id of incoming accepted call with J. LAGADEC' - addition, entry id='new accepted incoming call entry id', position indicator='0' - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity = 30 - IE << CALL INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s10.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Incoming Accepted Calls List' - event multiplicity = 10 - IE << CALL INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
Pass criteria:	Verify all answers	
Comments:	At a4, the IUT may send Read entries command more than one time. The actual field id values (FIDS) depend on the used list (LI). At a5.2 a delete entry command is used in order to make sure that an actual LiA session will be created even if IUT uses caching (and as IUT is in range). At s6.1, tester sends {CC-CONNECT} message before delete entry confirm in order to avoid premature release of the service call. At s10.2 and s10.3, the total number of calls in both lists after one deletion and one addition is as before (both are incoming accepted calls on line 0). This test is similar to TC_PT_NG1.N.16_BV_1705 except that the PT may use the All Calls List instead of the Incoming Accepted Calls List.	

TC_PT_NG1.N.16_BV_2008	Missed calls (or All calls) log - Delete entry - Max syncing time after log entering
Test purpose:	Missed call entry deletion from another PP (simulated PP2) PP1 uses either **All Calls List** OR **Missed Calls List** as data source for the local missed calls log. Testing synchronization of IUT (using caching or not), in front of a Part 5 FP 1- Simulation of missed call deletion from another PP (PP2) (two entries deleted: one in the Missed call list and one in the All Calls List) through notifications (one of them extended). 2- User invited to open Missed calls log (and press "Y" when done) on IUT (PP1). Opening the missed calls log ensures (if PP uses caching) that syncing is not deferred in the case the PP planned to defer it. 3- Whether PP uses caching or not, deletion appears before <CC.NG.04> timer expiry during user consultation.
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.3 and 6 (Missed and All Calls Lists); clause 7.4.10.10.2 or 7.4.10.10.3 depending on whether the PP uses caching or not
Initial condition:	Test content for the All Calls List (see clause 4.1.1.1.5) IUT is NG PP1, TS_1 is NG FP, TS_2 is NG PP2 F0 = {'Number', 'Name', 'Date and Time', 'Read status', 'Line name', 'Line id', 'Number of calls'} IF PT_IXIT_11=YES (i.e. IUT uses "All Calls List" as data source) THEN LI='**All Calls List**', FIDS = F0 ∪ {'Call type'}, NB=30 ELSE LI='**Missed Calls List**', FIDS = F0, NB=10 T-00
Time sequence:	s1.1 [TS_1 >> IUT]: 1- Simulation of missed call deletion from another PP (PP2) {**FACILITY**} message with <<EVENTS NOTIFICATION>> IE with event type/subtype of 'List change indication/All Calls List' and <<LIST CHANGE DETAILS>> IE with orig. PP = PP2, deletion, entry id = 'VAN DER VYNC entry id' s1.2 [TS_1 >> IUT]: {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with <Missed call, 'No new missed call arrived',0> (=<01H,82H,80H>), <List change indication, Missed Calls List, 9>(=<03H,82H,89H>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)> s1.3 [TS_1]: 2- User invited to open Missed calls log (press "Y" when done) s1.4 [USR >> IUT]: **Open the [All or Missed] Calls Log**. s1.5 [USR >> TS_1]: (*immediately*) **Press "Y"** s1.6 [TS_1]: Timer T2 started, with timeout = <CC.NG.04> (before T2 expiry) LiA access with list LI (see initial conditions) a1 [IUT >> TS_1]: {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT]: {**CC-CALL-PROC**} a2 [IUT >> TS_1]: <**Start session**, List id=LI id, nb of sorting fields =n> s3 [TS_1 >> IUT]: <**Start session confirm**, session id=1, total nb=NB, discriminator type=0, nb of sorting fields =1,sorting field id1 = 'Date and Time'> a3 [IUT >> TS_1]: (**optional**) <**Query supported entry fields**> s4 [TS_1 >> IUT]: (**if requested**) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 'Read status' - non-editable fields: FIDS \ {'Read status'} a4 [IUT >> TS_1]: (*optional)* <**Read entries**, session id=1, start index=s, direction=0, counter= i, mark entries request= don't care value, list entry field id 1..n = some or all ids among FIDS> s5 [TS_1 >> IUT]: For each <**Read entries**> received: <**Read entries confirm**, session id=1>, followed by <**data packet/data packet last**> with the number i of requested entries from s start index 3- Whether PP uses caching or not, deletion appears before <CC.NG.04> timer expiry during user consultation a5 [IUT >> USR]: (before T2 expiry) "VAN DER VYNC"/missed call entry is absent
Pass criteria:	Verify all answers

Comments:	At s1.1 and s1.2, the extended notification sent by TS_1 (NG FP) after entry deletion may be 1/ ignored by PP1 not using caching, 2/ used immediately by PP1 using caching 3/ queued by PP1 using caching but deferring caching operation. At s1.3 and s1.4, opening of the missed call log causes immediate log syncing in case PP1 planned to defer caching of the log (notification queued on PP side). At a1, LiA service call could occur before s1.3 if PT uses caching and does not defer syncing operation. At a2, the PT starts a session with either the Missed Calls List or the All Calls List depending on PT_IXIT_11 (see initial conditions). At a4, If PP uses caching, it is however allowed to use Read entries (e.g. temporarily not using caching because of user interaction), but shall still respect timer <CC.NG.04>. At a4, the actual field id values (FIDS) depend on the used list (LI). At a5, the user may either see the entry disappear within timeout, or may not be able to see the list until the deleted entry is removed (e.g. an hourglass is displayed).

TC_PT_NG1.N.16_BV_2009	Missed calls (or All calls) log - Delete all - Read entries when empty	
Test purpose:	Testing delete list in front of a Part 5 FP. Corresponds to "delete all" from a log perspective. 1-LiA session (required at least in order to perform list deletion) 2- Delete the list used as data source (i.e. either the Missed Calls List or the All Calls List 3- Close the list access service 4- Notification for the deleted list 5- Re-open the used log 6- Close the list access service	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.3 and 6;	
Initial condition:	Test content for Missed Calls List (clause 4.1.1.1.2) and All Calls List (clause 4.1.1.1.5) IUT is NG PP1, TS_1 is NG FP F0 = {'Number', 'Name', 'Date and Time', 'Read status', 'Line name', 'Line id', 'Number of calls'} IF PT_IXIT_11=YES (i.e. IUT deletes the "All Calls List") THEN LI='**All Calls List**', FIDS = F0 ∪ {'Call type'}, NB=30 ELSE LI='**Missed Calls List**', FIDS = F0, NB=10	
Time sequence:	T-00	
	s1 [USR >> IUT]	**Open the [All or Missed] Calls log**
	a1.1 [IUT >> USR]	(If PP caches LI; cf. PT_IXIT_15 or PT_IXIT_12) Some entries displayed.
		1-LiA session required at least in order to perform list deletion
	a1.2 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, list id=LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field ids among FIDS>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=3, total nb=NB, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Date and Time'>
	a3 [IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
	s4 [TS_1 >> IUT]	(**if requested**) < **Query supported entry fields confirm**, session id=3> with: - editable fields: 'Read status' - non-editable fields: FIDS \ {'Read status'}
		(If PP does not cache LI; cf. PT_IXIT_15 or PT_IXIT_12)
	a4 [IUT >> TS_1]	<**Read entries**, session id=3, start index=s, direction=0, counter= i, mark entries request= don't care value, list entry field identifier 1..n = some or all ids among FIDS>
	s5 [TS_1 >> IUT]	For each <Read entries> received: <**Read entries confirm**, session id=3>, followed by <**data packet/data packet last**> with the number i of requested entries
	a5 [IUT >> USR]	Corresponding entries displayed.
	s6 [USR >> IUT]	2- Delete the list
	a6 [IUT >> TS_1]	<**Delete list**, session id=3>
	s7.1 [TS_1 >> IUT]	<**Delete list confirm**, session id=3>
	s7.2 [USR >> IUT]	3- Close the list access service
	a7 [IUT >> TS_1]	(**optional**) <**End session**, session id=3>
	s8 [TS_1 >> IUT]	(*If <End session>*) <**End session confirm**, session id=3>
	a8 [IUT >> TS_1]	{**CC-RELEASE**} message
	s9.1 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
		4- Notification for the deleted list
	s9.2 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>>

		- identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	s9.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of Missed call/'No new missed call arrived' - event multiplicity=0 unread messages (=<01H,82H,80H>) - event type/subtype of List change indication/Missed Calls List - event multiplicity= 0 message in total (=<03H,81H,80H>) - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	s9.4 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**Events Notification**>> IE with: - event type/subt='List change ind./Incoming Accepted Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	s9.5 [TS_1 >> IUT]	(*Tester supports* NG1.N.16_18 "Outgoing calls list") {**FACILITY**} message with: - <<**Events Notification**>> IE with: - event type/subtype of 'List change ind./Outgoing Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	s9.6 [USR >> IUT]	5- Re-open the used log (**optional**; *should not be used by PP using caching with list LI*)
	a9 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s10 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a10 [IUT >> TS_1]	<**Start session**, List id=LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field ids among FIDS>
	s11 [TS_1 >> IUT]	<**Start session confirm**, session id=4, total nb=0, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Date and Time>
	a11 [IUT >> TS_1]	Log indicated as empty
	s12 [USR >> IUT]	6- Close the list access service
	a12 [IUT >> TS_1]	(optional) <**End session**, session id=4>
	s13 [TS_1 >> IUT]	(*If* <*End session*>) <**End session confirm**, session id=4>
	a13 [IUT >> TS_1]	{**CC-RELEASE**} message
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:		
Comments:	At s4, if IUT uses command 'query supported entry fields', the tester indicates the Part 5 specific fields of the All Calls List ('Read status' and 'Number Of Calls'). From s9.2 to s9.5 no extended notification is used as the full resync request is enough to indicate that the list is empty. At s9.6, for PPs using caching with list LI, the log should have been emptied with no access the remote list as the previous notification indicates that the list is empty.	

TC_PT_NG1.N.16_BV_2010	Missed Calls (or All Calls) Log - Browse entries - Initiate external call from missed call	
Test purpose:	1- Open [All or Missed] Calls Log 2- For caching PPs, trigger LiA access with full resync requests 3- Timer T2 started, with timeout = <CC.NG.04> 4- LiA session with LI started 5- (*locally or remotely*) LI browsed from newest to oldest; then oldest to newest call 6- Entries displayed in the correct sequence 7- Phoning back "R.ALOUSSI" entry (either from LiA or as first call, depending on IUT) 8- End-to-end U-plane connection 9- Hang up	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.3, 7.4.10.5.6 and 7.4.10.6.2; TS 102 527-5 [15], clause 7.4.10.10	
Initial condition:	Test content for Missed Calls List (clause 4.1.1.1.2) and All Calls List (clause 4.1.1.1.5) F0 = {'Number', 'Name', 'Date and Time', 'Read status', 'Line name', 'Line id', 'Number of calls'} IF PT_IXIT_11=YES (i.e. IUT uses "All Calls List" as data source) THEN LI='**All Calls List**', FIDS = F0 ∪ {'Call type'}, NB=30 ELSE LI='**Missed Calls List**', FIDS = F0, NB=10 T-00	
Time sequence:	s1.1 [USR >> IUT]	1- Open [All or Missed] Calls Log.
		2- For caching PPs, trigger LiA access with full resync requests
	s1.2 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <Missed call, A new external missed voice call just arrived, 1> (=<01H,81H,81H>) - <List change ind., Missed calls list, 10> (=<03H,81H,0AH>) >> - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s1.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - <List change ind., All Calls List, 30>(=<03H,84H,1EH>) >> - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s1.4 [TS_1]	3- Timer T2 started, with timeout = <CC.NG.04>
		4- LiA session with LI started
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = LI id, nb of sorting fields =n (n ≥ 0) followed by n sorting field ids among FIDS>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=NB, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Date and Time'>
	a3 [IUT >> TS_1]	(*optional*) <**Query supported entry fields**>
	s4.1 [TS_1 >> IUT]	(*if requested*) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 'Read status' - non-editable fields: FIDS \ {'Read status'}
	s4.2 [USR >> IUT]	5- (*either locally or remotely*) List browsing from newest to oldest call; then from oldest to newest call
	a4 [IUT >> TS_1]	(*either as a result of step 2* [for PPs caching LI] *or of step 5* [for PPs not caching LI]) <**Read entries**, session id=1, start index=s, direction=0, counter= i, mark entries request= don't care value, list entry field id 1..n = some or all ids among FIDS>
	s5 [TS_1 >> IUT]	(*For each <Read entries>;* P200 entries read before T2 expiry): <**Read entries confirm**, session id=1>, followed by <**data packet/data packet last**> with the number i of requested entries from s start index
	a5 [IUT >> USR]	6- Entries displayed in the correct sequence

	s6 [USR >> IUT]	7- Phoning back "R.ALOUSSI" entry with option 1 or 2 (entry can be selected using the number "0675000209")
	a6.1 [IUT >> TS_1]	(option 1: *Pseudo outgoing parallel call*) {**CC-INFO**} with: - IE <<MULTI-KEYPAD>> set to 1CH 15H digits together with "065000209" digits - IE <<CALL-INFORMATION>> specifying (line 0, line 1, line 2 or None) =<(0, 0, 0 or 1 or 2 or 127)>
		(option 2 from a5.2 to a7.2: *LiA release and first outgoing call*)
	a6.2 [IUT >> TS_1]	<**End session**, session id=1>
	s7 [TS_1 >> IUT]	<**End session confirm**, session id=1>
	a7 [IUT >> TS_1]	{**CC-RELEASE**} message
	s8 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a8.1 [IUT >> TS_1]	{**CC-SETUP**} message with: - IE <<BASIC-SERVICE>> 'Normal call setup' - IE <<CALL-INFORMATION>> specifying (line 0) or (None)
	a8.2 [IUT >> TS_1]	{**CC-INFO**} message with - IE <<MULTI-KEYPAD>> set to "065000209", - IE <<CALL-INFORMATION>> specifying (line 0) or (None)
	s9.1 [TS_1 >> IUT]	{**CC-CONNECT**} message with: - (*if not sent before*) IE <<CODEC-LIST>>
	s9.2 [TS_1 >> IUT]	{**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (**line 0**, full VoIP line type info, call id a) =<(0,0,0), (0,5,1), (1,0,value a)>
	s9.3 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call proc)** =<(1, 0, value a), (2,1,3)>
	s9.4 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call alerting**) =<(1, 0, value a), (2,1,4)>
	s9.5 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**) =<(1, 0, value a), (2,1,5)>
	a9 [IUT <> TS_1]	8- End-to-end U-plane connection
	s10 [USR >> IUT]	9- Hang up
	a10 [IUT >> TS_1]	{**CC-RELEASE**} message
	s11 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	Tester does not implement the NG1.N.16_26 "Virtual contact list and call list per line" procedure At a3, IUT caches LI if (PT_IXIT_11=YES and PT_IXIT_15=YES) or if (PT_IXIT_11=NO and PT_IXIT_12=YES)	

TC_PT_NG1.N.16_BV_2111	Contact List - Handling of three contact numbers	
Test purpose:	Check that the PP respects the rules concerning the handling of multiple field instances in case the FP supports 3 contact numbers in a Contact List entry (the IUT may support 1, 2 or 3 contact numbers). The following steps are used: 1 - Initiate modification of first contact number (a) for 'ALEXANDER Christian' to (e) 2 - Initiate removal of first contact number (e) from contact 'ALEXANDER Christian' 3 - (*if PT_IXIT_1 is supported*) initiate addition of a 2nd contact number for contact 'ALEXANDER Christina'	
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.10.5.7 and 7.4.10.1, 'Field instances management' entry Contact List content (see clause 4.1.1.1.6), modified in s1.1 below. IUT is NG PP1, TS_1 is NG FP a = (fixed) 00441324778824, and b = (work) 00449876543210 are the telephone numbers of the 1st contact in the list. c = (fixed) 00441324778812 is the telephone number of the 2nd contact in the list. d = (mobile) 00441234567890 is an additional contact created for the purpose of the present test case. e = (fixed) 00441324778825 (= contact (a) with last digit modified from 4 to 5). ∅ represents an empty contact number field.	
Time sequence:	s1.1 [TS_1]	Add locally 3rd contact number (d) to contact ALEXANDER Christian
	s1.2 [USR >> IUT]	Open the Contact List
	a1 [IUT >> TS_1]	<**Start session**, List id = 05H, nb of sorting fields =0>
	s2 [TS_1 >> IUT]	<**Start session confirm**, session id=s, total nb=6, discriminator type = 0, nb of sorting fields = 1, sorting field id1 =1>
	a2 [IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
	s3.1 [TS_1 >> IUT]	(**if requested**) < **Query supported entry fields confirm**, session id=s>. with editable entry fields including field 03H ('Contact number') **3 times**.
	s3.2 [USR >> IUT]	1- Initiate modification of first contact number (a) for 'ALEXANDER Christian' to (e)
	a3 [IUT >> TS_1]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = (at least) 03H (**m times, with m ≥ 1**)>
	s4.1 [TS_1 >> IUT]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact data including the requested (and available) contact numbers: (a) only if m=1, (a,b) if m=2, and (a,b,d) if m ≥ 3
	s4.2 [USR >> IUT]	Confirm modification of (a) to new value (e)
	a4 [IUT>> TS_1]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact data including the following contact numbers: - (e) only if m=1, (e,b) if m=2, (e,b,d) if m=3, - (e,b,d) or (e,b,d, etc.) if m > 3 (etc representing between 1 and m-1 numbers that will be ignored by TS_1).
	s5 [TS_1 >> IUT]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a5 [IUT >> USR]	After browsing, new value of first contact number (e) displayed
	s6.1 [TS_1 >> IUT]	{**FACILITY**} message with <<EVENTS NOTIFICATION>> IE with event type/subtype of 'List change indication/Contact List' and <<LIST CHANGE DETAILS>> IE with orig. PP = PP1, - modification, entry id = 'ALEXANDER Christian' entry id, position indicator=0.
	s6.2 [USR >> IUT]	2- Initiate removal of first contact number (e) from contact 'ALEXANDER Christian'
	a6 [IUT >> TS_1]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = (at least) 03H (**m times, with m ≥ 1**)>
	s7.1 [TS_1 >> IUT]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact data including the requested (and available) contact numbers: (e) only if m=1, (e,b) if m=2, and (e,b,d) if m ≥ 3
	s7.2 [USR >> IUT]	Confirm removal of first contact number (e)
	a7 [IUT >> TS_1]	<**Save entry**, session id=s, entry id =u > followed by

		<data packet/data packet last> with contact data including the following contact numbers (∅ represents the empty contact number field): - (∅) if m=1, (∅,b) if m=2, (∅,b,d) if m=3, - (∅,b,d) or (∅,b,d, etc.) if m > 3 (etc representing between 1 and m-1 numbers that will be ignored by TS_1).
	s8 [TS_1 >> IUT]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a8 [IUT >> USR]	- if PT_IXIT_1 is NOT supported, (b) only is displayed - otherwise (b,d) only are displayed, i.e. (e) not displayed
	s9.1 [TS_1 >> IUT]	{**FACILITY**} message with <<EVENTS NOTIFICATION>> IE with event type/subtype of 'List change indication/Contact List' and <<LIST CHANGE DETAILS>> IE with orig. PP = PP1, - modification, entry id = 'ALEXANDER Christian' entry id, position indicator=0.
	s9.2 [USR >> IUT]	3- (*if PT_IXIT_1 is supported*) initiate addition of a 2nd contact number for contact 'ALEXANDER Christina'
	a9 [IUT >> TS_1]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = (at least) 03H (**m times, with m ≥ 2**)>
	s10.1 [TS_1 >> IUT]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact data including at least the (only) contact number (c) (no other number, even empty)
	s10.2 [USR >> IUT]	Enter additional contact number (d) and confirm
	a10 [IUT >> TS_1]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact data including the contact numbers (c,d) or (d,c) (order at PP will)
	s11 [TS_1 >> IUT]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a11 [IUT >> USR]	After browsing, contact numbers (c) and (d) displayed in any order
	s12.1 [TS_1 >> IUT]	{**FACILITY**} message with <<EVENTS NOTIFICATION>> IE with event type/subtype of 'List change indication/Contact List' and <<LIST CHANGE DETAILS>> IE with orig. PP = PP1, - modification, entry id = 'ALEXANDER Christina' entry id, position indicator=entry id of 'ALEXANDER Christian' entry.
	s12.2 [IUT >> TS_1]	<**End session**, session id=s>
	a12 [TS_1 >> IUT]	<**End session confirm**, session id=s>
	s13 [IUT >> TS_1]	{**CC-RELEASE**} message
	a13 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	We assume the tester supports 3 numbers per contact and uses the Contact List (defined in clause 4.1.1.1.6) but with an additional number for contact 'ALEXANDER Christian' (see s1.1), so that we have a contact with 3 numbers. In a4 and a7, additional numbers represented by 'etc' should not exist if the PP uses the 'Query supported entry fields' command.	

TC_PT_NG1.N.16_BV_2112	Phonebook - Add/remove entries - Max syncing time after contacts modifications	
Test purpose:	Contact addition from another PP (simulated PP2) IUT uses the **Contact List** as data source for the local phonebook, which is cached (PT_IXIT_16=YES is assumed). Testing synchronization of IUT in front of a Part 5 FP during phonebook consultation (clause 7.4.10.10.2/Use case 2) 1- Open the phonebook and browse it 2- Simulation of contact modifications from another PP (PP2) through an extended notification 3- Take notification into account within <CC.NG.04> while phonebook is consulted 4- Close the list access service	
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.10.5.7 (Contact List entry fields), 7.4.10. 10.2/Use case 2 Test content for the Contact List (see clause 4.1.1.1.6) IUT is NG PP1, TS_1 is NG FP, TS_2 is NG PP2 IUT caches the contact list (PT_IXIT_16=YES) IUT indicates "Support of the 'Extended list change notification' procedure" T-00	
Time sequence:	s1.1 [USR >> IUT]	1 - Open the phonebook and browse it
		2- Simulation of contact modifications from another PP (PP2)
	s1.2 [TS_1]	Add contact (Name='DA VINCI', First name='Leonardo', Contact nb1='7509263428444', Associated melody=3, Line id =(3,0)) Remove the two contacts with Name 'ALOUSSI' and Name 'DEL PIETRO')
	s1.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/Contact List - event multiplicity= 9 messages in total (=<03H,85H,89H>) - IE <<**List change details**>> with: - originating PP = PP2 - addition, entry id = 'new DA VINCI contact entry id', position indicator=entry id of BORDONADO Karlità entry. - deletion, entry id = 'ALOUSSI' - deletion, entry id = 'DEL PIETRO' - IE <<**Call information**>> - identifier type/subtype='Line id/Line id for external call'=0/3, - identifier value = lid0
	s1.4 [TS_1]	Timer T2 started, with timeout = <CC.NG.04>
		3- Take notification into account within <CC.NG.04> while phonebook is consulted
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 05H, nb of sorting fields = n (n ≥ 0) followed by n sorting field ids among 01H 02H 03H (04H) 05H >
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=3, total nb=10, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	a3 [IUT >> TS_1]	<**Read selected entries**, session id=si, mark entries request= don't care value, list entry field id 1..n = some or all ids among 01H 02H 03H (04H) 05H, Selection = (type="selection from entry identifiers", description= (nb=1,entry id='DA VINCI entry id')>
	s4 [TS_1 >> IUT]	<**Read selected entries confirm** session id=si, partial delivery=0, counter=1>, followed by <**data packet/data packet last**> with the requested entry
	a4 [IUT >> USR]	(**before T2 expiry**) "new contact entry" added by PP2 is displayed in the phonebook, other two contact are deleted.
	s5 [USR >> IUT]	4- Close the list access service
	a5 [IUT >> TS_1]	(optional) <**End session**, session id=4>
	s6 [TS_1 >> IUT]	(*If <End session>*) <**End session confirm**, session id=4>
	a6 [IUT >> TS_1]	{CC-RELEASE} message
	s7 [TS_1 >> IUT]	{CC-RELEASE-COM} message

Pass criteria:	Verify all answers
Comments:	At s1.3, the number of messages correspond to the list after all modifications At a3 only the added entry is read (not the two deleted ones) At a4, the extended notification sent by TS_1 (NG FP) after contacts modifications (at s1.3) shall be taken into account within timeout <CC.NG.04> during phonebook consultation. The user may either see the modification appear within timeout, or may not be able to see the phonebook until the modification are made (e.g. an hourglass is displayed)

TC_PT_NG1.N.16_BV_2114	Contact List - Slow browsing in a list of 25 entries - Initiate an external call	
Test purpose:	Replace for Part 5 similar Part 3 test TC_PT_NG1.N.16_BV_2101, with a longer Contact List (**25 entries** in total), allowing to check the support of a long list.	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.7 and 7.4.10.1, 'Field instances management' entry	
Initial condition:	Contact List as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) FP does not implement the NG1.N.16_26 "Virtual Contact List and call list per line" procedure. TS_1 is connected to only 2 lines (line 0 and line 1) T-00	
Time sequence:	s1.1 [TS_1 >> USR]	*User invited to open phonebook and press "Y" when done*
	s1.2 [USR >> IUT]	Open the phonebook *TS_1 informed that the phonebook is open ("Y" pressed)*
	s1.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION= < List change indication, Contact List, 25> =<03H,85H,99H>) >> - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s1.4 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION= < List change indication, Contact List, 25> =<03H,85H,99H>) >> - IE<<CALL-INFORMATION>> specifying (line 1) =<(0, 0, lid1)>
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message with IE <<CODEC-LIST G.722>>
	a2 [IUT >> TS_1]	<**Start session**, List id = 05H, nb of sorting fields = n (n≥0) followed by n sorting field ids among 01H, 02H, 03H, 05H>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=25, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	a3 [IUT >> TS_1]	*None*
	s4.1 [IUT]	List initial display started (entry 1 at least will be displayed)
	s4.2 [USR >> IUT]	Scrolling down towards the end of the alphabetical list
	a4 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter= i, list entry field id 1..n = some or all identifiers among 01H, 02H, 03H, 05H>
	s5 [TS_1 >> IUT]	<**Read entries confirm**, session id=1>, followed by - <**data packet/data packet last**> with the number i of requested entries from s start index
	a5 [IUT >> USR]	Entries scrolled in the direction of ascending alphanumerical order (i.e. from ALEXANDER to WOJCIECHOSKI) (*If end of list is not reached*) **go back to s4.2**
	s6 [USR >> IUT]	Scrolling up towards the beginning of the alphabetical list
	a6 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter= i, list entry field id 1..n = some or all identifiers among 01H, 02H, 03H, 05H>
	s7 [TS_1 >> IUT]	<**Read entries confirm**, session id=1>, followed by - <**data packet/data packet last**> with the number i of requested entries from s start index
	a7 [IUT >> USR]	Entries scrolled in the direction of descending alphanumerical order (i.e. from WOJCIECHOSKI to ALEXANDER) (*If beginning of list is not reached*) **go back to s6**
	s8 [USR >> IUT]	Phoning back "WOJCIECHOSKI" entry (entry can be selected using contact number 1 "0675000321")
	a8 [IUT >> TS_1]	(*if LiA session is still open, e.g. if no caching is used)*: a8.1 (*Pseudo outgoing parallel call*) {**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to 1C15H and "0675000321" - IE <<CALL-INFORMATION>> specifying (line u) =<(0, 0, u)> with u = 0, 1 or 127 *if LiA session was already closed, e.g. in case caching is used)*: a8.2 (*first outgoing call*) {**CC-SETUP**} message with IEs <<BASIC-SERVICE>> 'Normal call setup' and <<CALL-INFORMATION>> specifying (line u) =<(0, 0, u)> with u = 0, 1 or 127

		{**CC-INFO**} message with - IE <<MULTI-KEYPAD>> set to "0675000321", - IE <<CALL-INFORMATION>> specifying (line u) =<(0, 0, u)>
	s9.1 [TS_1 >> IUT]	{**CC-CONNECT**} message with: (*if not sent before*) <<CODEC-LIST>> IE
	s9.2 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying: - (*if u = None*) (line 0) = <(0,0,0)>, (*otherwise*) (line u) = <(0,0,u)> - (**full VoIP line type info**, call id a) =<(0, 5, 1), (1, 0, value a)>
	s9.3 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call proc**)=<(1, 0, value a), (2, 1, 3)>
	s9.4 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call alerting**)=<(1, 0, value a), (2, 1, 4)>
	s9.5 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)>
	a9 [IUT <> TS_1]	End-to-end U-plane connection
	s10 [USR >> IUT]	Hang up
	a10 [IUT >> TS_1]	{**CC-RELEASE**} message
	s11 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers - Steps a1/s2, a2/s3, a4/s5 and a6/s7 could occur asynchronously at different positions in time if PT uses caching (and for a4/s5/a6/s7 with different parameters and number of uses).	
Comments:	- This TC distinguishes the notion of *phonebook* (local MMI item) from the notion of *Contact List* (FP located item). If IUT does not use caching, both items are accessed synchronously, otherwise asynchronously. - This test case replaces test TC_PT_NG1.N.16_BV_2101 and uses a longer Contact List. - IUT may not be able to display all special characters but shall support UTF-8 encoding format (see Table 5a in clause 4.1.1.1.6). - In s1.3 and s1.4, TS_1 implicitly requests to the Part 5 PP using caching a full resynchronisation of the list. - In s4.1, actual list initial display is performed following first use of a4/s5. - In s4.2, scrolling down shall start as soon as initial display in s4.1 occurred. - In s9.1, {CC-CONNECT} either connects the LiA session if still existing (a8.1 was used), or represents early {CC-CONNECT} of a first outgoing call (a8.2 was used).	

TC_PT_NG1.N.16_BV_2115	Contact List - Fast browsing support without overlap	
Test purpose:	Check that the PP supports a quick walk through the list entries and does not overlap commands (e.g. for some MMI; the user presses "next" key several times in order to access another part of the list)	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.7 and 7.4.10.1, 'Command overlap forbidden' and 'Field instances management' subsections	
Initial condition:	Contact List as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) N = 25 = Rank of the entry targeted by fast browsing, when entry 1 is initially displayed T1 = 12,5 seconds timer after whose expiry all Read entries should have been completed FP does not implement the NG1.N.16_26 "Virtual Contact List and call list per line" procedure. TS_1 is connected to only 2 lines (line 0 and line 1)	
Time sequence:	T-00	
	s1.1 [TS_1 >> USR]	*User invited to open phonebook and press "Y" when done*
	s1.2 [USR >> IUT]	Open the phonebook *TS_1 informed that the phonebook is open ("Y" pressed)*
	s1.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION= < List change indication, Contact List, 25> =<03H,85H,99H>) >> - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s1.4 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<EVENTS NOTIFICATION= < List change indication, Contact List, 25> =<03H,85H,99H>) >> - IE<<CALL-INFORMATION>> specifying (line 1) =<(0, 0, lid1)>
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 05H, nb of sorting fields = n (n≥0) followed by n sorting field ids among 01H, 02H, 03H, 05H>
	s3.1 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=25, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	s3.2 [IUT]	List initial display started (entry 1 at least will be displayed)
	s3.3 [USR >> IUT]	Browsing at high speed for displaying (at least) entry N
	a3.1 [IUT >> TS_1]	(*as many times as necessary*) <**Read entries**, session id=1, start index=s, direction=d, counter= i, list entry field id 1..n = some or all identifiers among 01H, 02H, 03H, 05H>
	a3.2 [TS_1]	(*Once when first* Read entries *is received in* a3.1) Start timer T1
	s4 [TS_1 >> IUT]	(*For each read entries received*) <**Read entries confirm**, session id=1>, followed by - <**data packet/data packet last**> with the number i of requested entries from s start index (*If entry N is not reached*) **go back to s3.3**
	a4.1 [TS_1 >> USR]	(*After* T1 *is over)* Display invitation to look at IUT's display
	a4.2 [IUT >> USR]	Entry N (at least) is displayed
	s5 [USR >> IUT]	Close the Contact List
	a5 [IUT >> TS_1]	<**End session**>
	s6 [TS_1 >> IUT]	<**End session confirm**>
	a6 [IUT >> TS_1]	{**CC-RELEASE**} message
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers - Steps a1/s2, a2/s3.1, a3.1/s4 could occur asynchronously at different positions in time if PT uses caching (and for 3.1/s4 with different parameters and number of uses). - In a3.1 verify that 'Read entries' does not overlap the previous answer in s4 (i.e. the previous *Read entries confirm* (if any), including related data packets, was completely sent before the first byte of this Read entries is received). - In a4.2 verify that IUT has not crashed.	
Comments:	- This TC distinguishes the notion of *phonebook* (local MMI item) from the notion of *Contact List* (FP located item). If IUT does not use caching, both items are accessed synchronously, otherwise asynchronously.	

	- In s1.3 and s1.4, TS_1 implicitly requests to the Part 5 PP using caching a full resynchronization of the Contact List. - There should be some Read entries commands between s3.1 and s3.2 for IUT to display an initial Contact List content. High speed browsing only takes places afterwards. - In s3.3, browsing shall start as soon as initial display in s3.2 occurred; the form of high speed browsing used depends on the PT MMI type (e.g. several quick key presses, quick finger flick on a tablet, etc.). - In a3.1, the number of Read entries sent by IUT depends on IUT implementation and on how IUT handles the possible congestion of MMI requests (queuing them locally or not, cancelling some of them or not, etc.). - The 'Associated Melody' field is not tested, although supported by FP (see a2).

TC_PT_NG1.N.16_BV_2151	Contact List - Read entry - Check 'All lines' correct handling	
Test purpose:	Check that PP understands 'All lines' specific coding (no line identifier value)	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.7 (line id field) and 7.4.10.1, 'Field instances management' entry.	
Initial condition:	Contact List content (see clause 4.1.1.1.6) IUT is NG PP1, TS_1 is NG FP, TS_2 is NG PP2 T-00	
Time sequence:	s1.1 [TS_1]	1- Simulation of entry creation from another PP (PP2) Name= "ALBERT", First name= "PETER", Contact number1= "06123321", **Line Id = "All lines"**
	s1.2 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP2, - addition, entry id = new 'ALBERT' entry id, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Contact List' and - event multiplicity = 1 message in total for 'All lines' - IE << CALL INFORMATION>> with: - id/subtype/value=Line id/All lines/∅ =0/4 (no value).
	s1.3 [TS_1]	*User invited to open the Contact list and to press "Y" when done*
	s1.4 [USR >> IUT]	Open the Contact List
	s1.5 [USR >> TS_1]	(*immediately*) **Press "Y"**
	s1.6 [TS_1]	Timer T2 started, with timeout = <CC.NG.04>
	a1 [IUT >> TS_1]	(*before T2 expiry*) {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 05H, nb of sorting fields = n (n ≥ 0) followed by n sorting field ids among 01H, 02H, 03H, 05H>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=3, total nb=11, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	a3 [IUT >> TS_1]	<**Read entries**, session id=3, start index=s, direction=0, counter=i, mark entries request= don't care value, list entry field identifier 1..n = some or all field ids among 01H, 02H, 03H, 05H>
	s4 [TS_1 >> IUT]	For each <Read entries> received, <**Read entries confirm**, session id=3> from TS_1, followed by <data packet/data packet last> with the number i of requested entries
	a4 [IUT >> USR]	For each entry read, entry content is displayed on IUT
	s5 [USR >> IUT]	Close the list access service from IUT
	a5 [IUT >> TS_1]	(**optional**) <End session, session id=3>, (**mandatory**) {CC-RELEASE} message
	s6 [TS_1 >> IUT]	(**if <End session> was received**) <**End session confirm**, session id=3> (**always**) {CC-RELEASE-COM} message
Pass criteria:	- Verify all answers - In a3, field id '03'H shall be present at least twice if the manufacturer has declared the support of several 'Contact number' fields in the Contact List on PT side (PT_IXIT_1). See also at the beginning of clause 6.16, "Multiple instances of the 'contact number' field in the Contact List" clause. - In a4, verify on IUT's display that the entry is correctly displayed (IUT shall correctly support the 'All lines' coding). - IUT may also handle the optional field id 04H (associated melody) in Contact List entries. ('start session', 'read entries' commands of the current test case). Test case shall not fail because of this.	
Comments:	- Tester does not implement the NG1.N.16_26 "Virtual contact list and call list per line" procedure.	

TC_PT_NG1.N.16_BV_2152	Contact List - Read entries - Check support of any entry id values	
Test purpose:	Check that PP is able to handle any entry id values, and in particular does not confuse list indices and entry identifiers	
Reference:	TS 102 527-3 [14], clause 7.4.10.1.	
Initial condition:	Contact List content (see clause 4.1.1.1.6). T-00	
Time sequence:	s1.1 [TS_1]	Use the following entry identifiers for the Contact List: 16307, 15400, 2354, 8546, 14323, 4542, 6721, 5144, 1943, 4211.
	s1.2 [USR >> IUT]	Open the Contact List and browse the list
	a1 [IUT >> USR]	The browsed list entries are displayed
	s2 [USR >> IUT]	Close the list access service
Pass criteria:	- In a1, the browsed list entries shall be correctly displayed.	

TC_PT_NG1.N.16_BV_2153	Contact List - Read entries - Partial delivery
Test purpose:	Test that PP correctly handles the partial delivery bit when set *Partial delivery* allows the FP to answer a PP request for too many entries with a subset of these entries (instead of answering with an error)
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6
Initial condition:	Contact List content (see clause 4.1.1.1.6) FP does not implement the NG1.N.16_26 "Virtual Contact List and call list per line" procedure T-00
Time sequence:	s1 [USR >> IUT] Open the **Contact List**. a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List identifier = 05H, nb of sorting fields =n (n ≥ 0) followed by n sorting field identifiers among 01H, 02H, 03H, 04H, 05H> s3 [TS_1 >> IUT] <**Start session confirm**, session id=1, total nb=10, discriminator type=0, nb of sorting fields =1,sorting field id1 =1> a3 [IUT >> TS_1] <**Read entries**, session id=1, start index=s, direction=don't care, counter= i, mark entries request= don't care value, list entry field identifier 1..n = some or all identifiers among 01H, 02H, 03H, 04H, 05H> s4.1 [TS_1 >> IUT] For each <Read entries> received: - **if (i=1)** <**Read entries confirm**, session id=1, **partial delivery=0**>, followed by <data packet/data packet last> with the entry of index s - **if (i≥2)** (**first time**) <**Read entries confirm**, session id=1, **partial delivery=1**>, followed by <data packet/data packet last> with a number of entries equal to i-1, from s start index, and in the requested direction. - **if (i≥2)** (**next times**) <**Read entries confirm**, session id=1, **partial delivery=0**>, followed by <data packet/data packet last> with a number of entries equal to i, from s start index, and in the requested direction. s4.2 [USR >> IUT] Browse into the list on IUT from first contact to the last one in alphabetical order. a4 [IUT >> USR] For each entry read: entry content is displayed on IUT in the correct sequence from first contact to the last one. s5 [USR >> IUT] Hang up on IUT a5 [IUT >> TS_1] {**CC-RELEASE**} message s6 [TS_1 >> IUT] {**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers. - Verify that the non-delivered entry in s4.1 when i≥2 (first time) is requested again in the next use of the 'Read entries' command in a3.
Comments:	The tester sets the 'partial delivery' bit to '1' only once in the session (i.e. the first time IUT requests more than one entry at once). - If the PP never requests more than one entry in all uses of the 'Read entries' command in a3, it is assumed that the PP never requests more than one entry at a time for this list and the test therefore succeeds (because such a PP does not need to support partial delivery for that list).

TC_PT_NG1.N.16_BV_2205	Internal Names List - PP handset name related test cases	
Test purpose:	- Check that the PP supports UTF-8 coding for handset names. - Check that the PP supports modifying its own handset name.	
Reference:	TS 102 527-3 [14], clause 7.4.10.5.8	
Initial condition:	IUT is PP1 T-00	
Time sequence:		**(UTF8 names support)**
	s1.1 [TS_1]	Create the following entries (instead of clause 4.1.1.1.7 contents) in the Internal Names List: - 31H, "Küche", 30H (IUT own entry) - 32H, "Salle à manger", 30H - 33H, "Køkken", 31H - 39H, "Cámara", 30H
	s1.2 [TS_1 >> IUT]	{**FACILITY**} message with IE <<EVENTS NOTIFICATION= <List change indication, Internal Names List, 4> (=<03H,86H,84H>) >>
	s1.3 [USR >> IUT]	Open the Internal Names List
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 06H, nb of sorting fields =n (n≥0) followed by n sorting field identifiers among 01H, 02H, 03H>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=4, discriminator type=0, nb of sorting fields =1,sorting field id1 =1>
	a3 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=0, counter= i, mark entries request= don't care value, list entry field identifier 1..n = some or all identifiers among 01H, 02H, 03H>
	s4.1 [TS_1 >> IUT]	For each <Read entries> received: <**Read entries confirm**, session id=1>, followed by <**data packet/data packet last**> with "i" requested entries from s start index and 'own' property bit set when IUT entry is read
	s4.2 [USR >> IUT]	Browse into the list on IUT
	a4 [IUT >> USR]	Internal names entries PP1, PP2, PP3, and PP9 are displayed. PP1 (IUT own entry) may be displayed in a special way.
		(PP's own entry modification)
	s5 [USR >> IUT]	Select and edit "Küche" entry (PP1)
	a5 [IUT >> TS_1]	<**Edit entry**, session id=1, entry id= PP1 entry id, list entry field id 1..n = some or all ids among 01H, 02H, 03H>
	s6.1 [TS_1 >> IUT]	<**Edit entry confirm**, session id=1>, followed by <**data packet/data packet last**> with PP1 entry content
	s6.2 [USR >> IUT]	PP1 name modified to "Bedroom"
	a6 [IUT >> TS_1]	<**Save entry**, session id=1, entry id= PP1 entry id> followed by <**data packet/data packet last**> modifying "Name" field to "Bedroom"
	s7.1 [TS_1 >> IUT]	<**Save entry confirm**, session id=1, entry id= PP1 entry id, position index=1, total number of available entries=4>
	s7.2 [USR >> IUT]	Close the list access service from IUT
	a7 [IUT >> TS_1]	(**optional**) <End session, session id=3>, (**mandatory**) {CC-RELEASE} message
	s8 [TS_1 >> IUT]	{**FACILITY**} message with IE <<EVENTS NOTIFICATION= <[Extended] List change indication, Internal Names List, 4> (=<03H,86H,84H>) >>
	a8 [IUT >> USR]	(if IUT displays handset name in idle) Display of the new handset name "Bedroom"
	s9 [TS_1 >> IUT]	(**if <End session> was received**) <**End session confirm**, session id=3> (**always**) {**CC-RELEASE-COM**} message

Pass criteria:	- Verify all answers. - Verify in answer a4 that PP1, PP2, PP3 and PP9 names are correctly displayed.
Comments:	- Following s1.2, IUT could open the Internal Names List in order to process the change. - To run this test case, especially in s1.3, it might be necessary to access a dedicated menu on the IUT which allows to modify IUT own handset name. -The call interception field is PIN protected (see clause 4.1.1.1.7). As a consequence, the IUT might request the user to edit and save the Current PIN Code field in the DECT System Settings List, either before a1, or before any instance of answer a5. Test equipment shall allow all of these implementations. Possible session with DECT System Settings List implies fulfilment of DECT System Settings List related requirements (see beginning of clause 6.16). -After s8, the IUT may re-access the Internal Names List.

TC_PT_NG1.N.16_BV_3902	Line Settings List - Line id/Line name - Save entry with editable and non-editable fields	
Test purpose:	Check that the Part 5 PP editing a field does not include any non-editable field. Non-editable fields include here Line id (01H, by standard) and 'Multiple call mode' (08H, for the test only).	
Reference:	TS 102 527-3 [14], clause 7.4.11.4 and annex H	
Initial condition:	Line Settings List content (see clause 4.1.1.1.9), except that the 'Multiple call mode' field shall be non-editable (in addition to 'Line id'). T-00	
Time sequence:	s1 [USR >> IUT]	Open the Line Settings List
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 08H, nb of sorting fields = n (n≥0) followed by n sorting field ids among 01H, 02H >
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=2, discriminator type=0, nb of sorting fields =1,sorting field id1 =2>
	a3 [IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
	s4 [TS_1 >> IUT]	(**if received**) <**Query supported entry fields confirm**, session id=1, number of editable entry fields=0BH, list entry field id 1..n = 01H, 03H, 04H, 05H, 06H, 07H, 09H, 0AH, 0BH, 0CH, 0DH), number of non-editable entry fields=02H, list entry field id 1..n = 02H, 08H)>
	a4 [IUT >> TS_1]	Read *all* supported line settings for lines 1 and 2, with one or several *Read entries* commands: <**Read entries**, session id=1, start index=s, direction=0, counter=i, mark entries request= don't care value, list entry field id 1..n = (part or all of) 01H, 02H, 03H, 08H, 09H, 0AH, 0BH, 0CH, 0DH completed with supported optional settings (see annex A, Table A.7) >
	s5 [TS_1 >> IUT]	For each <Read entries> received: <**Read entries confirm**, session id=1>, followed by <**data packet/data packet last**> with the requested field(s)
	a5 [IUT >> USR]	Line settings parameters displayed on IUT for line 1 and line 2 matching the Line Settings List contents of clause 4.1.1.1.9
	s6 [USR >> IUT]	Initiate edition of the line name field
	a6 [IUT >> TS_1]	<**Edit entry**, session id=n, entry identifier=u, list entry field id 1=(at least) 01H>
	s7.1.[TS_1 >> IUT]	<**Edit entry confirm**, session id=n> followed by <**data packet/data packet last**> with entry content (entry id = u)
	s7.2 [USR >> IUT]	Enter value 'My First Line' for the line name field and confirm
	a7 [IUT >> TS_1]	<**Save entry**, session id=n, entry identifier=u> followed by <**data packet/data packet last**> with (at least) Line name field set to "My First Line", but neither Line id nor 'Multiple call mode' fields
	s8.1 [TS_1 >> IUT]	<**Save entry confirm**, session id=n, entry id=u, position index=1, total number of available entries=1>
	s8.2 [USR >> IUT]	Close the list access service
	a8 [TS_1 >> IUT]	(**optional**) <**End session**, session id=1>, (**mandatory**) {**CC-RELEASE**} message
	s9 [TS_1 >> IUT]	(**If <End session> received**) <**End session confirm**, session id=1> (**always**) {**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers - In a4, Settings fields can be read one by one, or all in the same <Read entries> command. In any case, settings will probably be displayed in several sub-menus. - In a5, verify visually the matching of displayed value with clause 4.1.1.1.9. - In a7, verify that non-editable fields are not saved (02H and 08H). - Possible session with DECT System Settings List implies fulfilment of DECT System Settings List related requirements (see beginning of clause 6.16).	

Comments:	- In s4, 09H (Intrusion call) and 0AH (Permanent CLIR) are indicated as supported because TS_1 plays the role of a Part 5 FP. - If optional a3 is not sent, a4 becomes the answer to s3. - IUT could perform edit entry (a6) between the first and last uses of the 'Read entries' command (a4/s5) so as to lock the entry as soon as possible. In that case s6 is merged with s7.2. - IUT could open the Internal Names List in order to get handset names and display a user-friendly "attached handsets" setting.

TC_PT_NG1.N.16_BV_5201	DECT System Settings List - FP power level - Edit entry - Save entry	
Test purpose:	Check that the Part 5 PP is able to read and modify the 'FP power level' setting.	
Reference:	TS 102 527-5 [15], clauses 7.4.11.3 and 7.10.3.1	
Initial condition:	DECT system setting list content (see clause 4.1.1.1.8). T-00	
Time sequence:	s1 [USR >> IUT]	Open the DECT system settings list
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 07H>
	s3 [TS_1 >> IUT]	<**Start session confirm**, session id=1, total nb=1, discriminator type=0, nb of sorting fields=0>
	a3 [IUT >> TS_1]	(**optional**) <**Query supported entry fields**>
	s4 [TS_1 >> IUT]	(*if received*) <**Query supported entry fields confirm**, session id=1, - number of editable entry fields=0BH, list entry field id 1..n = - 01H ('Current PIN code'), (mandatorily editable) - 02H ('Clock master') - 03H (Base reset'), (mandatorily editable) - 04H, 05H, 06H, 07H, 08H (FP IP address related fields) - 0CH ('Emission mode'), (mandatorily editable) - 0DH ('New PIN code'), (mandatorily editable) - 0EH ('FP power level'), (mandatorily editable) - number of non-editable entry fields=03H, list entry field id 1..n - 09H ('FP version / Firmware version'), (mandatory) - 0AH ('FP version / Eeprom version'), (mandatory) - 0BH ('FP version / Hardware version')>, (mandatory)
	a4 [IUT >> TS_1]	Read the 'FP power level' field of the DECT system settings list: <**Read entries**, session id=1, start index=s, direction=0, counter=1, mark entries request= don't care value, list entry field identifier 1..n = at the minimum 'FP power level' identifier 0EH >
	s5 [TS_1 >> IUT]	For each <**Read entries**> received: <**Read entries confirm**, session id=1, start index=1, counter=1>, followed by <**data packet/data packet last**> with the requested field(s)
	a5 [IUT >> USR]	Value "Normal power level" is displayed on IUT
	s6 [USR >> IUT]	Initiate edition of 'FP power level' field
	a6 [IUT >> TS_1]	<**Edit entry**, session id=1, entry id=1, field id 1=(at least) 0EH>
	s7.1 [TS_1 >> IUT]	<**Edit entry confirm**, session id=1> followed by <**data packet/data packet last**> with entry content (entry id =1)
	s7.2 [USR >> IUT]	Enter value 'Reduced power level' for the field and confirm
	a7 [IUT >> TS_1]	<**Save entry**, session id=n, entry identifier=u> followed by <**data packet/data packet last**> with (at least) field 0EH set to 'Reduced power level'
	s8.1 [TS_1 >> IUT]	<**Save entry confirm**, session id=1, entry id=1, position index=1, total number of available entries=1>
	s8.2 [USR >> IUT]	Close the list access service
	a8 [TS_1 >> IUT]	(**optional**) <**End session**, session id=1>, (**mandatory**) {**CC-RELEASE**} message
	s9 [TS_1 >> IUT]	(*If <End session> received*) <**End session confirm**, session id=1> (**always**) {**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers	
Comments:		

TC_PT_NG1.N.16_BV_6000(P,D)	LiA/Voice call interactions - LiA with first external outgoing voice call initiation - Audio(P=called phone, D=default codec) **(Parameterized test)**
Test purpose:	Check that PP opening LiA session supports default codec D from FP (with possibly incompatible slot type), then after initiating first (pseudo parallel) outgoing call with P, that PP supports if required codec change (and slot type modification from FP as described in clause 7.4.10.6.2. Check ring back tone and then voice call audio
Reference:	TS 102 527-1 [13], clauses 7.3.3 and 7.3.4, TS 102 527-3 [14], clause 7.4.10.6.2
Initial condition:	P = called party (Phone A or Phone C) Missed Calls List content as in clauses 4.1.1.1.2 P (and P number) added to the Missed Calls List cP = codec required to call P (G.722 for P=Phone A, G.726 for P=Phone C) scP = slot type required by cP D = default codec used by FP sD = slot type required by codec D T-00
Time sequence:	s1 [USR >> IUT] Open the Missed Calls List a1 [IUT >> TS_1] MAC layer setup with slot type=s {**CC-SETUP**} message with: - IE <<BASIC-SERVICE **LiA** >> - (**optional**) <<CODEC-LIST>> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} with IE <<CODEC-LIST>> set to D a2 [IUT >> TS_1] (*If s* ≠ sD) Slot type modification to sD s3 [USR >> IUT] Browse the Missed Calls List until P entry is reached. Call P back from the Missed Calls List. a3.1 [IUT >> TS_1] (*Pseudo outgoing parallel call initiation*) {**CC-INFO**} message with - IE <<MULTI-KEYPAD>> set to 1C15H and P number, - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> a3.2 [IUT >> TS_1] (**optional**) <**End session**, session id=si> s4.1 [TS_1 >> IUT] (*If <End session>*) <**End session confirm**, session id=si> (*If* D ≠ cP, perform s4.2 to s5.2) s4.2 [TS_1 >> IUT] {**CC-SERVICE-CHANGE**} with IE <<CODEC-LIST>> set to cP a4.1 [IUT >> TS_1] {**CC-SERVICE-ACCEPT**} message a4.2 [IUT >> TS_1] {**IWU-INFO**} with IE <<CODEC-LIST>> set to cP s5.1 [TS_1 >> IUT] {**IWU-INFO**} with IE <<CODEC-LIST cP >> s5.2 [TS_1 >> IUT] *(If s*D ≠ scP*)* Slot type modification to scP s5.3 [TS_1 >> IUT] {**CC-CONNECT**} message s5.4 [TS_1 >> IUT] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, **full VoIP line type information**, call id a) =<(0, 0, 0), (0, 5, 1), (1, 0, value a)> s5.5 [TS_1 >> IUT] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call proc**)=<(1, 0, value a), (2, 1, 3)> s5.6 [TS_1 >> IUT] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call alerting**)=<(1, 0, value a), (2, 1, 4)> and IE <<SIGNAL>> with value 01H = 'Ring back tone on' a5 [IUT >> USR] Ring back tone generated s6.1 [USR >> P] Pick up on P s6.2 [TS_1 >> IUT] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)> a6 [IUT <> P] End to end connection s7 [TS_1 >> IUT] {**CC-RELEASE**} message a7 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers In a4.2, verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_1. In a5, verify that the ring back tone can be heard on IUT. In a6, verify that audio can heard in both directions.
Comments:	IUT may initiate the LiA service call in full slot or in long slot.

TC_PT_NG1.N.16_BV_6004	LiA/Voice call interaction - LiA with first outgoing voice call initiation - external G.722 call - default codec G.726
Test purpose and body:	See test TC_PT_NG1.N.16_BV_6000(P=called phone=Phone A, D=default codec=G.726)

TC_PT_NG1.N.16_BV_6005	LiA/Voice call interaction - LiA with first outgoing voice call initiation - external G.726 call - default codec G.722
Test purpose and body:	See test TC_PT_NG1.N.16_BV_6000(P=called phone=Phone C, D=default codec=G.722)

TC_PT_NG1.N.16_BV_6100(P,D)	LiA/Voice call interactions - LiA with first external incoming voice call - Audio (P=calling phone, D=default codec) **(Parameterized test)**
Test purpose:	Check that PP opening LiA session supports the default codec D from FP (with a possibly incompatible slot type), then after accepting the first (pseudo parallel) incoming call from P, that PP supports (if required) codec change from FP as described in clause 7.4.10.6.3. Check CW tone (or regular ringing) and then voice call audio
Reference:	TS 102 527-1 [13], clauses 7.3.3 and 7.3.4, TS 102 527-3 [14], clause 7.4.10.6.3
Initial condition:	P = calling party (Phone A or Phone C) cP = codec required by P (G.722 for P=Phone A, G.726 for P=Phone C) scP = slot type required by cP D = default codec used by FP sD = slot type required by codec D Missed Calls List content as in clause 4.1.1.1.2 T-00
Time sequence:	s1 [USR >> IUT] Open the Missed Calls List a1 [IUT >> TS_1] MAC layer setup with slot type=s {**CC-SETUP**} message with - IE <<BASIC-SERVICE **LiA** >> - (**optional**) IE <<CODEC-LIST>> s2.1 [TS_1 >> IUT] {**CC-CALL-PROC**} message s2.2 [USR >> IUT] Browse the Missed Calls List continuously s2.3 [TS_1 >> IUT] {**CC-CONNECT**} with IE <<CODEC-LIST>> set to D a2 [IUT >> TS_1] (*If s* ≠ sD) Slot type modification to sD s3 [TS_1 >> IUT] {**CC-INFO**} message with: - IE <<SIGNAL>> with value 07H indicating 'Call waiting tone on' - IE <<CALLING PARTY NUMBER <P number> >> - IE <<CALL-INFORMATION>> specifying: - (call id a, **CS call setup**) =<(1, 0, value a), (2, 1, 1)> - (line 0,full VoIP line type info)=<(0, 0, 0),(0, 5, 1)> a3.1 [IUT >> USR] Incoming call presentation: - either through a CW tone (stopped by PP) - or through ringing, as for an incoming first call (stopped by PP) a3.2 [IUT >> USR] CLIP presentation on display according to display capabilities a3.3 [IUT >> TS_1] (**optional**) <**End session**, session id=si> s4.1 [TS_1 >> IUT] (*If* <*End session*>) <**End session confirm**, session id=si> s4.2 [USR >> IUT] Incoming call acceptance ("pick up") a4 [IUT >> TS_1] (*Pseudo call waiting acceptance*) {**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to (1CH, 35H) digits - IE <<CALL-INFORMATION>> with (call id a) =<(1, 0, value a)> (*If* D ≠ cP perform s5 to s6.2) s5 [TS_1 >> IUT] {**CC-SERVICE-CHANGE**} with IE <<CODEC-LIST>> set to cP a5.1 [IUT >> TS_1] {**CC-SERVICE-ACCEPT**} message a5.2 [IUT >> TS_1] {**IWU-INFO**} with IE <<CODEC-LIST>> set to cP s6.1 [TS_1 >> IUT] {**IWU-INFO**} with IE <<CODEC-LIST cP >> s6.2 [TS_1 >> IUT] *(If s*D ≠ scP*)* Slot type modification to scP s6.3 [TS_1 >> IUT] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)> a6 [IUT <> TS_1] End to end connection s7 [TS_1 >> IUT] {**CC-RELEASE**} a7 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers In a3.1, verify that the incoming call presentation can be heard on IUT. In a5.2, verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_1.
Comments:	In a1, IUT may initiate the LiA service call in full slot or in long slot. Missed Calls List browsing initiated in s2.2 continues until a3.3 if <End session> is sent by IUT, or until a6 otherwise.

TC_PT_NG1.N.16_BV_6104	LiA/Voice call interactions - LiA with first incoming voice call - external G.722 call - default codec G.726
Test purpose and body:	See test TC_PT_NG1.N.16_BV_6100(P=calling phone=Phone A, D=default codec=G.726)

TC_PT_NG1.N.16_BV_6105	LiA/Voice call interactions - LiA with first incoming voice call - external G.726 call - default codec G.722
Test purpose and body:	See test TC_PT_NG1.N.16_BV_6100(P=calling phone=Phone C, D=default codec=G.722)

TC_PT_NG1.N.16_BV_7002	Incoming SMS List - deletion of list		
Test purpose:	Verify that the IUT PP deletes all entries in the Incoming SMS List correctly		
Reference:	TS 102 527-5 [15], clause 7.4.10.4		
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 Incoming SMS List has ten entries as shown in clause 4.1.1.2.1		
Time sequence:			1- Start an Incoming SMS List session
	s1	[USR >> IUT]	Open the Incoming SMS List (and possibly indicate intention to delete the list).
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2	[IUT >> TS_1]	<**Start session**, List identifier = 0CH denoting Incoming SMS List>
	s3.1	[TS_1 >> IUT]	<**Start session confirm**, List identifier = 0CH, session id = 1, total number = 10, discriminator type = 0>
	s3.2	[USR >> IUT]	2- Delete all entries in the Incoming SMS List.
	a3	[IUT >> TS_1]	<**Delete list**, Session id = 1>
	s4.1	[TS_1 >> IUT]	<**Delete list confirm**, Session id = 1>
	s4.2	[TS_1 >> IUT]	{**CC-RELEASE**} message
	a4	[IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s5	[TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Incoming SMS List' - event multiplicity= 0 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers		
Comments:	At s1, and especially if IUT uses caching, the IUT could start the session only after the user indicates intention to delete the list.		

TC_PT_NG1.N.16_BV_7003	Incoming SMS List - set Read status to unread	
Test purpose:	Verify that a PP correctly sets the entry status to unread on user command	
Reference:	TS 102 527-5 [15], clauses 7.4.1.6 and 7.4.35.1	
Initial condition:	IUT (PP1) is registered to TS_1 (NG FP) IUT is in state T-00 The Incoming SMS List has ten entries as shown in clause 4.1.1.2.1	
Time sequence:		Start an Incoming SMS List session
	s1 [USR >> IUT]	Open the Incoming SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0CH denoting Incoming SMS List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0CH, session id = 1, total number = 10, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction = 0 (forward), counter = n (n ≥ 3 assumed), any selection of list entry field ids>
	s4.1 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=1, counter=n>, followed by: <**data packet/data packet last**> with the content of the fields requested
	s4.2 [USR >> IUT]	Mark entry 3 as unread.
	a4 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 3, direction = 0 (forward), counter = 1, mark entries request = FFH, any selection of list entry field ids>
	s5.1 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=3, counter=1>, followed by: <**data packet/data packet last**> with the content of the fields requested
	s5.2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**LIST CHANGE DETAILS**>> with: - originating PP = PP1, - modification, entry id = 'entry 3 id, position indicator=entry 2 id - IE <<**EVENTS NOTIFICATION**>> with: - event type/subt.='SMS message/ No new SMS message arrived' - event multiplicity= 1 unread SMS - event type/subtype= 'List change indication/Incoming SMS List' - event multiplicity= 10 SMS in total - IE <<**CALL INFORMATION**>> with: - id type/subtype/value = service id/SMS service id/1
Pass criteria:	Verify all answers	
Comments:	The PP IUT could mark the entry as unread by using the Search entries command. This scenario is not tested. If the IUT does not read at least three entries in a3 the user should perform such actions on the list so that the IUT does read entry 3.	

TC_PT_NG1.N.16_BV_7004	Incoming SMS List - read SMS details	
Test purpose:	Verify that a PP can read SMS details in the Incoming SMS List	
Reference:	TS 102 527-5 [15], clause 7.4.35.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Incoming SMS List has ten entries, as shown in clause 4.1.1.2.1	
Time sequence:		Start an Incoming SMS List session
	s1 [USR >> IUT]	Open the Incoming SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0CH denoting Incoming SMS List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0CH, session id = 1, total number = 10, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction = 0 (forward), counter = n (n ≥ 2 assumed), any selection of list entry field ids>
	s4.1 [TS_1 >> IUT]	<**Read entries confirm**, session id = 1, start index = 1, counter = n>, followed by <data packet last> and a data packet containing the content of the fields requested
	s4.2 [USR >> IUT]	Requests sender number and SMS content of SMS entry 2
	a4 [IUT >> USR]	The Sender number and SMS content are displayed correctly as 0145567897 and 'My days are numbered' respectively
	s5 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	If the IUT does not read at least two entries in a3 the user should perform such actions on the list so that the IUT reads entry 2.	

TC_PT_NG1.N.16_BV_7005	Incoming SMS List - save number in message to Contact List
Test purpose:	Verify that a PP can read a number in SMS content in an Incoming SMS List entry and save that number to the Contact List
Reference:	TS 102 527-5 [15], clause 7.4.35.1
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Incoming SMS List has ten entries as shown in clause 4.1.1.2.1 The Contact List has ten entries as shown in clause 4.1.1.1.6
Time sequence:	Start an Incoming SMS List session s1 [USR >> IUT] Open the Incoming SMS List. a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List identifier = 0CH denoting Incoming SMS List> s3 [TS_1 >> IUT] <**Start session confirm**, List identifier = 0CH, session id = 1, total number = 10, discriminator type = 0> a3 [IUT >> TS_1] <**Read entries**, session id = 1, start index = 0, direction = 0 (forward), counter = n (n ≥ 9 assumed), any selection of list entry field ids> s4.1 [TS_1 >> IUT] <**Read entries confirm**, session id=1, start index=0, counter=n>, followed by: <**data packet/data packet last**> with the content of the fields requested s4.2 [USR >> IUT] Requests Number and SMS content of Incoming SMS entry 9 a4 [IUT >> USR] IUT displays (at least) the Number and SMS content of SMS entry 9 s5 [USR >> IUT] User saves the Number to the Contact List with values: Name = "RASKOLNIKOV", First name = "RODION", Contact number1 = "0296301005" Line id= Line id for external call/0 a5 [IUT >> TS_1] <**Start session**, List identifier = 05H denoting 'Contact List'> s6 [TS_1 >> IUT] <**Start session confirm**, List identifier = 05H, session id = 2, total number = 10, discriminator type = 0> a6.1 [IUT >> TS_1] <**Save entry**, session id = 2, Entry id = 0> a6.2 [IUT >> TS_1] <**data packet/data packet last**, session id = 2, content set to the values in s5> s7.1 [TS_1 >> IUT] <**Save entry confirm**, Entry id = 11, Position index = 8, Total number = 11> s7.2 [TS_1 >> IUT] {**CC-RELEASE**} message a7 [IUT >> TS_1] {**CC-RELEASE-COM**} message s8 [TS_1 >> IUT] {**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - addition, entry id = entry id of Rodion Raskolnikov, position indicator=entry id of Jérôme LAGADEC - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Contact List' - event multiplicity= 11 contacts in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = Line id/Line id for external call/0
Pass criteria:	Verify all answers
Comments:	The IUT may end session 1 before starting session 2. The IUT may read entries before saving (perhaps to check for duplicates). If the IUT does not read at least nine entries in a3 the user should perform such actions on the list so that the IUT reads entry 9.

TC_PT_NG1.N.16_BV_7006	Incoming SMS List - delete entry	
Test purpose:	Verify that a PP can delete entries from the Incoming SMS List	
Reference:	TS 102 527-5 [15], clause 7.4.35.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Incoming SMS List has ten entries as shown in clause 4.1.1.2.1	
Time sequence:		Start an Incoming SMS List session
	s1 [USR >> IUT]	Open the Incoming SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0CH denoting Incoming SMS List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0CH, session id = 1, total number = 10, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction = 0 (forward), counter = n (n ≥ 1 assumed), any selection of list entry field ids which shall include 01H>
	s4.1 [TS_1 >> IUT]	<**Read entries confirm**, session id = 1, start index = 1, counter = n>, followed by <data packet last> and a data packet containing the content of the fields requested
	s4.2 [USR >> IUT]	Deletes Incoming SMS entry with Number 0145567897
	a4 [IUT >> TS_1]	<**Delete entry**, session id = 1, Entry id = entry id of entry with Number 0145567897>
	s5.1 [TS_1 >> IUT]	<**Delete entry confirm**, session id = 1, Total number = 9>
	s5.2 [USR >> IUT]	Deletes Incoming SMS entry with Number 0321259514
	a5 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction = 0 (forward), counter = n (n ≥ 3 assumed), any selection of list entry field ids which shall include 01H>
	s6 [TS_1 >> IUT]	<**Read entries confirm**, session id = 1, start index = 1, counter = n>, followed by <data packet last> and a data packet containing the content of the fields requested
	a6 [IUT >> TS_1]	<**Delete entry**, session id = 1, Entry id = entry id of entry with Number 0321259514>
	s7.1 [TS_1 >> IUT]	<**Delete entry confirm**, session id = 1, Total number = 9>
	s7.2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a7 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s8 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - deletion, entry id = entry id of entry with Number 0145567897 - deletion, entry id = entry id of entry with Number 0321259514 - IE <<EVENTS NOTIFICATION>> with: - event type/subt.='SMS message/ No new SMS message arrived' - event multiplicity= 0 unread SMS - event type/subtype= 'List change indication/Incoming SMS List' - event multiplicity= 8 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:	The IUT has to re-read the list after s5.2 because it cannot assume that the list change notification it will have received after a4 does not cover changes made by other PPs. If the IUT does not read at least three entries in a3 the user should perform such actions on the list so that the IUT reads entry 3.	

TC_PT_NG1.N.16_BV_7101	Sent SMS List - delete entry	
Test purpose:	Verify that a PP can delete an entry from the Sent SMS List entry	
Reference:	TS 102 527-5 [15], clause 7.4.35.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Sent SMS List has eight entries as shown in clause 4.1.1.2.2	
Time sequence:		Start an Sent SMS List session
	s1 [USR >> IUT]	Open the Sent SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0DH denoting Sent SMS List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0DH, session id = 1, total number = 8, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction=0 (forward), counter = n (n ≥ 4 assumed), any selection of list entry field ids which shall include 01H>
	s4.1 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=1, counter=8>, followed by: <**data packet/data packet last**>with the content of the fields requested
	s4.2 [USR >> IUT]	Deletion of Sent SMS List entry with Number 0296301005
	a4 [IUT >> TS_1]	<**Delete entry**, session id = 1, Entry id = entry id of entry with Number 0296301005>
	s5.1 [TS_1 >> IUT]	<**Delete entry confirm**, session id = 1, Total number = 7>
	s5.2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - deletion, entry id = entry id of entry with Number 0296301005 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Sent SMS List' - event multiplicity= 7 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:	If the IUT does not read at least four entries in a3 the user should perform such actions on the list so that the IUT reads entry 4.	

TC_PT_NG1.N.16_BV_7102	Sent SMS List - deletion of list	
Test purpose:	Verify that a PP can delete all entries from the Sent SMS List entry	
Reference:	TS 102 527-5 [15], clause 7.4.10.4	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 Sent SMS List has eight entries as shown in clause 4.1.1.2.2	
Time sequence:		Start an Sent SMS List session
	s1 [USR >> IUT]	Open the Sent SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0DH denoting Sent SMS List'>
	s3.1 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0DH, session id = 1, total number = 8, discriminator type = 0>
	s3.2 [USR >> IUT]	Deletion of all entries in the Sent SMS List.
	a3 [IUT >> TS_1]	<**Delete list**, Session id = 1>
	s4.1 [TS_1 >> IUT]	<**Delete list confirm**, Session id = 1>
	s4.2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a4 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Sent SMS List' - event multiplicity= 0 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:	A PP IUT may issue a Delete entry command before the Delete list sequence.	

TC_PT_NG1.N.16_BV_7202	Outgoing SMS List - deletion of list	
Test purpose:	Verify that a PP can delete all entries from the Outgoing SMS List entry	
Reference:	TS 102 527-5 [15], clause 7.4.10.4	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Outgoing SMS List has three entries as shown in clause 4.1.1.2.3	
Time sequence:		Start an Outgoing SMS List session
	s1 [USR >> IUT]	Open the Outgoing SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0EH denoting Outgoing SMS List'>
	s3.1 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0EH, session id = 1, total number = 3, discriminator type = 0>
	s3.2 [USR >> IUT]	Delete all entries in the Outgoing SMS List.
	a3 [IUT >> TS_1]	<**Delete list**, Session id = 1>
	s4.1 [TS_1 >> IUT]	<**Delete list confirm**, Session id = 1>
	s5.1 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Outgoing SMS List' - event multiplicity= 0 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:	A PP IUT may issue a Delete entry commands before the Delete list sequence.	

TC_PT_NG1.N.16_BV_7301	Draft SMS List - deletion of entry	
Test purpose:	Verify that a PP can delete an entry from the Draft SMS List entry	
Reference:	TS 102 527-5 [15], clause 7.4.35.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The Draft SMS List has one entry as shown in clause 4.1.1.2.4	
Time sequence:		Start an Draft SMS List session
	s1 [USR >> IUT]	Open the Draft SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0FH denoting Draft SMS List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0FH, session id = 1, total number = 1, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction=0 (forward), counter = 1, any selection of list entry field ids which shall include 01H>
	s4.1 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=1, counter=1>, followed by <**data packet/data packet last**> with the content of the fields requested
	s4.2 [USR >> IUT]	Deletion of Draft SMS List entry with Number 0296301005
	a4 [IUT >> TS_1]	<**Delete entry**, session id = 1, Entry id = entry id of entry with Number 0296301005>
	s5.1 [TS_1 >> IUT]	<**Delete entry confirm**, session id = 1, Total number = 0>
	s5.2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - deletion, entry id = entry id of entry with Number 0296301005 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Draft SMS List' - event multiplicity= 0 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:		

TC_PT_NG1.N.16_BV_7302	Draft SMS List - deletion of list	
Test purpose:	Verify that a PP can delete all entries from the Draft SMS List entry	
Reference:	TS 102 527-5 [15], clause 7.4.10.4	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 Draft SMS List has one entry as shown in clause 4.1.1.2.4	
Time sequence:		Start an Draft SMS List session
	s1. [USR >> IUT]	Open the Draft SMS List.
	a1. [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2. [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2. [IUT >> TS_1]	<**Start session**, List identifier = 0FH denoting Draft SMS List'>
	s3.1 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0FH, session id = 1, total number = 1, discriminator type = 0>
	s3.2 [USR >> IUT]	Deletion of all entries in the Draft SMS List.
	a3 [IUT >> TS_1]	<**Delete list**, session id = 1>
	s4.1 [TS_1 >> IUT]	<**Delete list confirm**, session id = 1>
	s5.1 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5. [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s6 [TS_1 >> IUT]	(*Full resync request*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Draft SMS List' - event multiplicity= 0 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:		

TC_PT_NG1.N.16_BV_7304	Draft SMS List - read number from contact to use as recipient (using consecutive or parallel LiA sessions)	
Test purpose:	Verify that a PP can read an entry in the Contact List while a draft SMS is being composed.	
Reference:	TS 102 527-5 [15], clause 7.4.10.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 PT_IXIT_9 (PT Side Short Message Editing) is 'Not supported' Draft SMS List has no entries The Contact List has ten entries as shown in TS 102 841 [16], clause 4.1.1.1.6	
Time sequence:		Start an Draft SMS List session
	s1 [USR >> IUT]	Open the Draft SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0FH denoting Draft SMS List>
	s3.1 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0FH, session id = 1, total number = 0, discriminator type = 0>
	s3.2 [USR >> IUT]	Compose a short message with the text 'hola Karlità'
		(*At least if PT_IXIT_8 is 'Not supported', then process a3.1 to s5.1; otherwise jump to s5.2*) The IUT saves the entry.
	a3.1 [IUT >> TS_1]	<**Save entry**, session id = 1, entry id = 0>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = 1 - Entry field 'Name' set to BORDONADO, - Entry field 'SMS content' with data in UTF-8 of 'hola Karlità', - Entry field 'Sending request' set to value 0>
	s4 [TS_1 >> IUT]	<**Save entry confirm**, session id = 1, entry id = e>
	a4 [IUT >> TS_1]	<**End Session**, Session id = 1>
	s5.1 [TS_1 >> IUT]	<**End Session confirm**, session id = 1>
	s5.2 [USR >> IUT]	(*either from s3.2 or from s5.1*) Consult the Contact List to get the number to send the short message to
	a5 [IUT >> TS_1]	<**Start Session**, List identifier = 05H denoting Contact List>
	s6 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 05H, session id = 2, total number = 10, discriminator type = 0>
	a6 [IUT >> TS_1]	<**Read entries**, session id = 2, start index = 1, direction = 0 (forward), counter = n (n ≥ 4 assumed), any selection of list entry field ids which shall include 01H (Name) and 03H (Contact number)>
	s7 [TS_1 >> IUT]	<**Read entries confirm**, session id=2, start index=1, counter=n>, followed by <**data packet/data packet last**> with the content of the fields requested
	a7 [IUT >> USR]	IUT displays (at least) the Name and Contact numbers of the entries in the Contact List
	s8 [USR >> IUT]	The user chooses the Contact List entry for BORDONADO to be the recipient of the short message being composed and saves the message to the draft list
		(*optional*) The IUT ends the Contact List session
	a8.1 [IUT >> TS_1]	<**End session**, Session id = 2>
	s9 [TS_1 >> IUT]	<**End Session confirm**, Session id = 2>
		(*If a3.1 to s5.1 was performed, then process a9 to s11; otherwise jump to a11.1*)
	a9 [IUT >> TS_1]	<**Start session**, List identifier = 0FH denoting Draft SMS List>
	s10 [TS_1 >> IUT]	<**Start session confirm**, List id=0FH, session id=3, total number=1, discriminator type=0>
	a10 [IUT >> TS_1]	<**Edit entry**, session id=1, entry id=e, list entry field id 1..n = (at least):

		- (*optional*) Entry field id of 'Name', - Entry field id of 'Number', - (*optional*) Entry field id of 'SMS content', - Entry field id of 'Sending request'
	s11 [TS_1 >> IUT]	< **Edit entry confirm**, session id=s> followed by: <**data packet/data packet last**> with the 'edited' entry fields
	a11.1[IUT >> TS_1]	(*either from s11 or from s9*) <**Save entry**, session id = 1> with: - (*If a3.1 to s5.1 was performed*) entry id = e - (*otherwise*) entry id = 0
	a11.2[IUT >> TS_1]	<**data packet/data packet last**, session id=1>, with at least: - (*M if entry id=0; O if entry id=e and field present in a10*) Entry field 'Name' set to BORDONADO, - Entry field 'Number' set to the Number for BORDONADO in the Contact List, - (*M if entry id=0; O if entry id=e and field present in a10*) Entry field 'SMS content' with data in UTF-8 of 'hola Karlità', - Entry field 'Sending request' set to value 1
	s12.1[TS_1 >> IUT]	<**Save entry confirm**, session id = 1, entry id = e>
	s12.2[TS_1 >> IUT]	{**CC-RELEASE**} message
	a12 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s13 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = PP1, - addition, entry id = e, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype= 'List change indication/Draft SMS List' - event multiplicity= 1 SMS in total - IE <<CALL INFORMATION>> with: - id type/subtype/value = service id/SMS service id/0
Pass criteria:	Verify all answers	
Comments:	If the IUT does not read at least four entries in a6 the user should perform such actions on the list so that the IUT reads entry 4. - At a11.2 the fields 'Name' and 'SMS content' cannot be present if entry id=e (entry already saved before) and the same field is not present in a10.	

TC_PT_NG1.N.16_BV_7401	SMS Settings List - change fields	
Test purpose:	Verify that a PP can change the fields in the SMS Settings List 1- Start an SMS Settings List session 2- The user changes the values of the SMS Settings for SMS service id 1 3- The user disables SMS service 2.	
Reference:	TS 102 527-5 [15], clause 7.4.35.4	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00 The SMS Settings List has two entries as shown in clause 4.1.1.2.5SMS Settings List The fields 'Enable SMS', 'Max SMS size', SMSC Send Server, SMSC Receive Server are editable on tester side e1 = entry id for SMS service id 1 e2 = entry id for SMS service id 2	
Time sequence:		1- Start an SMS Settings List session
	s1 [USR >> IUT]	Open the SMS Settings List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List identifier = 0BH denoting SMS Settings List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 0BH, session id = 1, total number = 2, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index = 1, direction = 0 (forward), counter = n (n ≥ 2 assumed), all list entry field ids>
	s4 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=1, counter=2>, followed by <**data packet/data packet last**> with the content of the fields requested
	a4 [IUT >> USR]	IUT displays all fields of each entry in the SMS Settings List
	s5 [USR >> IUT]	2- The user changes the values of the SMS Settings for SMS service id 1 as follows: - Line id = 2, - Max SMS size = 280, - SMSC send server = 0123456787, - SMSC receive server = 0123456786, - SMS delivery report = 1, - SMS validity report = 167, - Allowed SMS character encodings = GSM/8-bit.
	s5.2 [USR >> IUT]	The user saves these changes.
	a5 [IUT >> TS_1]	<**Edit entry**, session id = 1, entry id = e1> with field id 1..n = (at least): - Line id, Max SMS size, - SMSC send server, SMSC receive server, - SMS delivery report, SMS validity report, - Allowed SMS character encodings.
	s6 [TS_1 >> IUT]	<**Edit entry confirm**, session id = 1>
	a6.1 [IUT >> TS_1]	<**Save entry**, session id = 1, entry id = e1 >
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = 1, entry id = e1, Entry fields as shown in s5>
	s7.1 [TS_1 >> IUT]	<**Save entry confirm**, session id = 1, entry id = e1>
	s7.2 [USR >> IUT]	3- The user disables SMS service 2.
	a7 [IUT >> TS_1]	<**Edit entry**, session id = 1, entry id = e2> with field id 1..n = (at least): - Enable SMS
	s8 [TS_1 >> IUT]	<**Edit entry confirm**, session id = 1>
	a8.1 [IUT >> TS_1]	<**Save entry**, session id = 1, entry id = e2>
	a8.2 [IUT >> TS_1]	<d**ata packet/data packet last**, session id = 1, entry id = e2> with entry field 'Enable SMS' set to value 0>
	s9.1 [TS_1 >> IUT]	<**Save entry confirm**, session id = 1, entry id = e2>
	s9.2 [TS_1 >> IUT]	{**CC-RELEASE**} message

	a9.1 [IUT >> TS_1] a9.2 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message {**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = IUT - modification, entry id = e1, position indicator=0 - modification, entry id = e2, position indicator=e1 - <<**Events notification**>> IE with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
Pass criteria:	Verify all answers	
Comments:	If the IUT does not read both entries in a3 the user should perform such actions on the list so that the IUT reads both entries.	

TC_PT_NG1.N.16_BV_8001	{CC-SETUP} crossing - LiA outgoing call from IUT - crossing incoming voice call - incoming call restarted	
Test purpose:	The exact steps used depend on PT_IXIT_16 value (if YES, contact list is cached). The following steps are performed: 1- (if contact list is cached) Simulation of contact modification from PP2 (extended notification) 2 - (in all cases) Open the phonebook (could occur before step 1) 3- IUT starts LiA session (*IF PT_IXIT_16=NO* immediately, otherwise within timer <CC.NG.04> from step 1 or 2 whichever comes last 4- Tester (FT) immediately answers with a crossing incoming call 5- Abnormal release of both calls 6- Tester (FT) restarts the incoming call within timer P-<CC.06>	
Reference:	EN 300 175-5 [5], clause 9.5.2.3	
Initial condition:	One PP is registered to the FP. IUT is NG PP1, TS_1 is NG FP. TS_2 is NG PP2 NG PP1 is attached to line 0 only Contact list as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) T-00	
Time sequence:		1- (*IF PT_IXIT_16=YES*) Simulation of contact modification from PP2
	s1.1 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/Contact List - event multiplicity= 25 messages in total (=<03H,85H,99H>) - IE <<**List change details**>> with: - originating PP = PP2 - modified entry id = 'ALOUSSI' - IE <<**Call information**>> - identifier type/subtype='Line id/Line id for external call'=0/3, - identifier value = lid0
	s1.2 [USR >> IUT]	2 - Open the phonebook
		3- (*IF PT_IXIT_16=NO* immediately, otherwise within timer <CC.NG.04> from s1.1 or s1.2 whichever comes last)
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv2>> - <<BASIC-SERVICE **LiA**>>
		4- Tester (FT) immediately answers with a crossing incoming call
	s2 [TS_1 >> IUT]	{**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=1>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - <<CALLING PARTY NAME = < Presentation allowed, UTF-8, Network provided, 'CNIP3 âàäéèë'> >> - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)>
		5- Abnormal release of both calls
	a2 [IUT >> TS_1]	{**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=1>> - <<RELEASE-REASON code='Insufficient resources'>>
	s3.1 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv2>> - <<RELEASE-REASON code='Insufficient resources'>>
		6- Tester (FT) restarts the incoming call within timer P-<CC.06>
	s3.2 [TS_1 >> IUT]	(*Restart call at timeout × 75%*) {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=3 >> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - <<CALLING PARTY NAME = < Presentation allowed, UTF-8, Network provided, 'CNIP3 âàäéèë'> >>

		- <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)>
	a3.1 [IUT >> TS_1]	{**CC-ALERTING**} message with: - <<TRANSACTION IDENTIFIER flag=1, value= 3 >> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	a3.2 [IUT >> USR]	IUT is ringing
	a3.3 [IUT >> USR]	IUT is presenting CNIP to the user, displaying 'CNIP3 âàäéèë'
	s4 [USR >> IUT]	Call is picked up
	a4 [IUT >> TS_1]	{**CC-CONNECT**} message with: - <<TRANSACTION IDENTIFIER flag=1, value= 3>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	s5.1 [TS_1 >> IUT]	{**CC-CONNECT-ACK**} message with: - <<TRANSACTION IDENTIFIER flag=0, value= 3>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	s5.2 [TS_1 >> IUT]	{**CC-INFO**} message with: - <<TRANSACTION IDENTIFIER flag=0, value= 3>> - <<CALL-INFORMATION>> specifying: (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)>
	a5 [IUT <> TS_1]	End-to-end U-plane connection
	s6 [USR >> IUT]	Hang up
	a6 [IUT >> TS_1]	{**CC-RELEASE**} message - <<TRANSACTION IDENTIFIER flag=1, value=3>>
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message - <<TRANSACTION IDENTIFIER flag=0, value=3>>
	a7	None
Pass criteria:	- Verify all answers. - Verify that after s3.1 IUT does NOT restart the LiA service call.	
Comments:	Steps s1.1 and s1.2 can be performed in any order At s1.2, the phonebook is the user view of the contact list. For a PT using caching, this does not necessarily imply LiA with the contact list. At a1, the {CC-SETUP} message is sent either as a result of s1.2 (if IUT is not using caching), or as a result of s1.1 and possibly also s1.2 (if IUT is using caching). At s3.2, when the incoming call is restarted, the FT is free to use another transaction value. It therefore uses value 3 here (after using value 1 in s2).	

TC_PT_NG1.N.16_BV_8005	{CC-RELEASE}/{CC-CONNECT} crossing - LiA outgoing call from IUT - crossing incoming voice call - incoming call restarted
Test purpose:	Test the PT behaviour when: 1 - Open the phonebook in order to perform entry deletion so that the PT starts an LiA service call (kind of outgoing call) 2- Close the phonebook (which triggers a {CC-RELEASE} from IUT) 3- the tester immediately answers with a crossing {CC-CONNECT} in order to present an incoming call 4- tester (FT) answers the release message 5- tester (FT) represents the incoming call
Reference:	TS 102 527-3 [14], clause 7.4.10.6.3, subsection 'Crossing with LiA service call release from PP side'
Initial condition:	One PP is registered to the FP. IUT is NG PP1, TS_1 is NG FP. TS_2 is NG PP2 NG PP1 is attached to line 0 only Contact list as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) T-00
Time sequence:	s1 [USR >> IUT] 1 - Open the phonebook in order to perform entry deletion a1 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id=05H, nb of sorting fields =n (n ≥ 0) followed by n sorting field ids among 01H 02H 03H (04H) 05H> s3 [TS_1 >> IUT] <**Start session confirm**, session id=4, total nb=NB, discriminator type=0, nb of sorting fields =1,sorting field id1 ='Name'> a3 [IUT >> TS_1] <**Delete entry**, session id=4, entry id = 'entry id of incoming accepted call with J. LAGADEC' > s4.1 [TS_1 >> IUT] <**Delete entry confirm**, session id=4, total nb of available entries=29> s4.2 [USR >> IUT] 2- Close the phone book a4 [IUT >> TS_1] <**End session**, session id=4> s5 [TS_1 >> IUT] <**End session confirm**, session id=4> a5 [IUT >> TS_1] {**CC-RELEASE**} message s6.1 [TS_1 >> IUT] 3- crossing {CC-CONNECT} in order to present an incoming call {**CC-CONNECT**} message 4- tester (FT) answers the release message s6.2 [TS_1 >> IUT] {**CC-RELEASE-COM**} message 5- tester (FT) represents the incoming call s6.3 [TS_1 >> IUT] {**CC-SETUP**} message with: - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)> a6.1 [IUT >> TS_1] {**CC-ALERTING**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a6.2 [IUT >> USR] IUT is ringing s7 [USR >> IUT] Call is picked up a7 [IUT >> TS_1] {**CC-CONNECT**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> s8.1 [TS_1 >> IUT] {**CC-CONNECT-ACK**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>

	s8.2 [TS_1 >> IUT]	{**CC-INFO**} message with: - <<CALL-INFORMATION>> specifying: (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)>
	a8 [IUT <> TS_1]	End-to-end U-plane connection
	s9 [USR >> IUT]	Hang up
	a9 [IUT >> TS_1]	{**CC-RELEASE**} message
	s10 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a10	None
Pass criteria:	- Verify all answers	
Comments:		

6.17 TC_PT_NG1.N.17 Calling line identity restriction tests cases

Clause 6.17 of TS 102 841 [16] shall apply.

6.18 TC_PT_NG1.N.18 Call forwarding (external calls) tests cases

Clause 6.18 of TS 102 841 [16] shall apply.

6.19 TC_PT_NG1.N.19 DTMF handling tests cases

Clause 6.19 of TS 102 841 [16] shall apply.

6.20 TC_PT_NG1.N.20 Tones provision tests cases

Clause 6.20 of TS 102 841 [16] shall apply.

6.21 TC_PT_NG1.N.21 Headset management tests cases

Clause 6.21 of TS 102 841 [16] shall apply.

6.22 TC_PT_NG1.N.22 Handling of lines where second calls are signalled in-band tests cases

Clause 6.22 of TS 102 841 [16] shall apply.

6.23 TC_PT_GAP.N.30 Calling Line Identification Presentation tests cases

Clause 6.23 of TS 102 841 [16] shall apply.

6.24 TC_PT_GAP.N.31 Internal call tests cases

Clause 6.24 of TS 102 841 [16] shall apply.

6.25 TC_PT_GAP.N.34 Calling Name Identification Presentation tests cases

Clause 6.25 of TS 102 841 [16] shall apply.

6.26 TC_PT_GAP.N.35 Enhanced security tests cases

In addition to clause 6.26 of TS 102 841 [16] the following test cases shall apply.

TC_PT_GAP.N.35_GC_101	Encryption of all calls when registered at an NG DECT Part 3 FP
Test purpose:	-
Reference:	EN 300 444 [12], clause 8.45.1
Initial condition:	TS_1 is a NG DECT Part 3 FP TS_1 does not indicate the support of 'Re-keying' and 'early encryption' (a42 bit) nor the support of 'NG-DECT Additional feature set nr.1 for extended wideband voice" (a36 bit) in the Extended higher layer capabilities part 2. TS_1 indicates the support of 'NG-DECT Wideband voice' (a24 bit) and the support of 'NG-DECT extended wideband voice services' (a29 bit) in the Extended higher layer capabilities part 2. IUT either in T-00 or not registered
Time sequence:	s1.1 [TS_1] Bit a44 set to 1 on TS_1 s1.2 [USR >> IUT] Start registration procedure a1 [IUT >> TS_1] {**ACCESS-RIGHTS-REQUEST**} message s2.1 [TS_1 >> IUT] {**ACCESS-RIGHTS-ACCEPT**} message s2.2 [USR >> IUT] Perform outgoing call a2 [IUT >> TS_1] {**CC-SETUP**} message s3 [TS_1 >> IUT] {**CC-CONNECT**} followed by a {**AUTHENTICATION-REQUEST**} message a3 [IUT >> TS_1] {**AUTHENTICATION-REPLY**} message s4 [TS_1 >> IUT] {**CIPHER_REQUEST**} message a4 [IUT] Verify that IUT activates encryption on MAC layer. Verify that encryption is activated and verify end-to-end U-plane connection. s5 [USR] Wait 66 seconds (<MM_re-keying.1> +10 %). a5 [IUT] Verify that encryption is still activated and verify end-to-end U-plane connection.
Pass criteria:	Verify all answers

TC_PT_GAP.N.35_BV_508	Release of unexpectedly unencrypted outgoing call in connect state despite of successful authentication - Release of subsequent calls
Test purpose:	Check that if a legacy FP performs a first ciphered outgoing call, the PP will trigger abnormal release of the next (two) outgoing calls if they are not ciphered
Reference: Initial condition:	EN 300 444 [12], clause 8.45.5.2 IUT has no access rights. TS_1 is in registration mode (bit a44 is set). TS_1 broadcasts that: - standard ciphering is supported (bit a37=1 in higher layer capabilities) - and that 're-keying' and 'early encryption' in Extended higher layer capabilities part 2 (bit a42) is not supported.
Time sequence:	s1 [USR >> IUT] Invoke registration procedure a1.1 [TS_1] Successful registration a1.2 [IUT >> TS_1] {**LOCATE-REQUEST**} message s2.1 [TS_1 >> IUT] {**LOCATE-ACCEPT**} message s2.2 [TS_1 >> IUT] Invoke outgoing call a2 [IUT >> TS_1] {**CC-SETUP**} message s3.1 [TS_1 >> IUT] {**CC-CONNECT**} message s3.2 [TS_1 >> IUT] Authentication of PP a3 [TS_1] Successful authentication of PP s4 [TS_1 >> IUT] FT initiated cipher switching a4.1 [TS_1 >> IUT] Successful FT initiated cipher switching a4.2 [TS_1 <> IUT] End to end U-plane connection s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5 [IUT >> TS_1] {**CC-RELEASE-COM**} message **Perform s6 to a9 two times** s6 [TS_1 >> IUT] Release of MAC connection a6 [TS_1] Successful release of MAC connection s7 [USR >> IUT] Invoke outgoing call at IUT a7.1 [IUT >> TS_1] Link establishment a7.2 [IUT >> TS_1] {**CC-SETUP**} message s8.1 [TS_1 >> IUT] {**CC-CONNECT**} message s8.2 [TS_1 >> IUT] {**AUTHENTICATION-REQUEST**} message a8 [IUT >> TS_1] {**AUTHENTICATION-REPLY**} message s9.1 [TS_1 >> IUT] (*Absence of FT initiated cipher switching*) s9.2 [TS_1] Start timer T001 (60s) a9 [IUT >> TS_1] (*before T.001 expiry*) {**CC-RELEASE-COM**} message containing IE <<Release Reason= <Security attack assumed> >>. (*if 1st time here*), go back to s6
Pass criteria:	Verify all answers In a9 verify that for each of the 2 outgoing call attempts without ciphering, abnormal release is performed
Comments:	In a9, PP checks the status of the link 15 seconds after {CC-SETUP}. However test equipment shall leave some flexibility (up to 60 seconds) before checking the {CC-RELEASE-COM} for the case IUT queries the user before releasing the link

6.27 TC_PT_NG1.A.1 Easy PIN code registration tests cases

Clause 6.27 of TS 102 841 [16] shall apply.

6.28 TC_PT_NG1.A.2 Easy pairing registration tests cases

Clause 6.28 of TS 102 841 [16] shall apply.

6.29 TC_PT_NG1.A.3 Handset locator tests cases

Clause 6.29 of TS 102 841 [16] shall apply.

6.30 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.31 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.32 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.33 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.34 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.35 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.36 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.37 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.38 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.39 Void

Descriptions of new portable part tests which are specific to NG DECT Part 5 start at clause 6.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous clauses.

6.40 TC_PT_GAP.N.1 Outgoing call

The following test cases shall apply. They are summarized in Table 2.

Table 18: Summary of contact number matching test cases on PT side

Side	Call rank	Implementation	Use Case (note 1)	TC number
PT	First call	Early {CC-CONNECT}	1	NOT TESTED
PT	First call	Non-early {CC-CONNECT}	1	TC_PT_GAP.N.1_BV_101
PT	2nd call	NA	1	TC_PT_NG1.N.7_BV_3201 (note 2)
PT	First call	Early {CC-CONNECT}	2	TC_PT_GAP.N.1_BV_102
PT	First call	Non-early {CC-CONNECT}	2	NOT TESTED
PT	2nd call	NA	2	TC_PT_NG1.N.7_BV_3202 (note 2)
PT	First call	Early {CC-CONNECT}	1,2	NOT TESTED
PT	First call	Non-early {CC-CONNECT}	1,2	NOT TESTED
PT	2nd call	NA	1,2	NOT TESTED
NOTE 1: Use cases 1 and 2 are described in clause 7.4.32 and correspond to 'Contact List matching' and 'contact provision by network' respectively. NOTE 2: 2nd call test cases are in clause 6.7.				

TC_PT_GAP.N.1_BV_101	Contact List matching in a first external outgoing call (non early CC-CONNECT implementation)
Test purpose:	-
Reference:	TS 102 527-5 [15], clause 7.4.32
Initial condition:	T-00; Contact List in the FP as defined in TS 102 841 [16], clause 4.1.1.1.6
Time sequence:	s1 [USR >> IUT] Outgoing call initiation on line 0 towards "0490413002" phone number a1 [IUT >> TS_1] {**CC-SETUP**} message with - (**2.1**) None (*kept for consistence with parallel call cases*) - (**2.2**) IEs <<BASIC-SERVICE>> 'Normal call setup', and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.3**) IE BASIC-SERVICE>> 'Normal call setup' (only) s2 [TS_1 >> IUT] (**2.2**) {**CC-SETUP-ACK**} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id a, CS call setup ack) =<(0, 0, 0), (0, 5, 1), (1, 0, value a), (2, 1, 2)> (**2.3**) {CC-SETUP-ACK} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> a2 [IUT >> TS_1] One or several {**CC-INFO**} messages, such that: (**2.3 only**) first {**CC-INFO**} message shall contain an IE <<CALL-INFORMATION>> specifying (line 0, call id a) =<(0, 0, 0), (1, 0, value a)> - all {**CC-INFO**} messages shall contain IE <<MULTI-KEYPAD>> set to (non-empty) si digits (i≥1), except perhaps the first {**CC-INFO**} in case 2.3 (so that s1 may be the empty string in that case) - the concatenation of si (i≥1) shall match "0490413002" - each {**CC-INFO**} shall contain (call id a) =<(1, 0, value a)> s3 [TS_1 >> IUT] (**2.3 only**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id a) =<(0, 0, 0), (0, 5, 1), (1, 0, value a)> (**in all cases**), {**CC-CALL-PROC**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call proc) =<(1, 0, value a), (2, 1, 3)> and IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'User provided', <Called party name> = 'FENJIRO' and <Called party firstname> = 'Carlos'. (**in all cases**), {**CC-CONNECT**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> a3 [TS_1 <> IUT] End-to-end U-plane connection s4 [USR >> IUT] Hang up on IUT a4 [IUT >> TS_1] {**CC-RELEASE**} message s5.1 [TS_1 >> IUT] {**CC-RELEASE-COM**} message s5.2 [TS_1 >> IUT] {**FACILITY**} message with: - IE <<**LIST CHANGE DETAILS**>> with: - originating PP = 0, - addition, entry id = first entry id, position indicator=0 - IE <<**EVENTS NOTIFICATION**>> with: - event type/subtype of 'List change indication/All Calls List' and - event multiplicity = 31 - IE << **CALL INFORMATION**>> with value (0, 0, lid0). s5.3 [TS_1 >> IUT] (*Tester supports NG1.N.16_18 "Outgoing calls list"*) {**FACILITY**} message with: - IE <<**EVENTS NOTIFICATION**>> with: - event type/subt of 'List change ind/Outgoing Calls List' - event multiplicity = 11 - IE << **CALL INFORMATION**>> with value (0, 0, lid0).
Pass criteria:	Verify all answers In a2, and in case there is no <<MULTI-KEYPAD>> IE in the message, substring s1 shall still be defined, but as the empty string. After a3, verify that the <<CALLED PARTY NAME>>is correctly handled by the PP.
Comments:	-

TC_PT_GAP.N.1_BV_102	Contact provision by network for a first external outgoing call (early CC-CONNECT implementation)
Test purpose:	-
Reference:	TS 102 527-5 [15], clause 7.4.32
Initial condition:	T-00; Contact List in the FP as defined in clause TS 102 841 [16], clause 4.1.1.1.6
Time sequence:	s1 [USR >> IUT] Outgoing call initiation on line 0 to "0123456789" phone number a1 [IUT >> TS_1] {CC-SETUP} message with - (**2.1**) None (*kept for consistence with parallel call cases*) - (**2.2**) IEs <<BASIC-SERVICE>> 'Normal call setup' and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> - (**2.3**) IE <<BASIC-SERVICE>> 'Normal call setup' (only) s2 [TS_1 >> IUT] (**2.2**) {CC-CONNECT} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id a) =<(0, 0, 0), (0, 5, 1), (1, 0, value a)> followed by a {CC-INFO} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> (**2.3**) {CC-CONNECT} with IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a) > followed by a {CC-INFO} with IE <<CALL-INFORMATION>> specifying (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> a2 [IUT >> TS_1] One or several {CC-INFO} messages, such that: (**2.3 only**) first {CC-INFO} message shall contain an IE <<CALL-INFORMATION>> specifying (line 0, call id a) =<(0, 0, 0), (1, 0, value a)> - all {CC-INFO} messages shall contain IE <<MULTI-KEYPAD>> set to (non-empty) si digits (i≥1), except perhaps the first {CC-INFO} in case 2.3 (so that s1 may be the empty string in that case) - the concatenation of si (i≥1) shall match "0123456789" - each {CC-INFO} shall contain (call id a) =<(1, 0, value a)> s3 [TS_1 >> IUT] (**2.3 only**) {CC-INFO} message with IE <<CALL-INFORMATION>> specifying (line 0, full VoIP line type information, call id a) =<(0, 0, 0), (0, 5, 1), (1, 0, value a)> (**in all cases**) {CC-INFO} with IE <<CALL-INFORMATION>> specifying (call id a, CS call proc) =<(1, 0, value a),(2, 1, 3)> and IE <<CALLED PARTY NUMBER>> set to '9876543210' and IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'Network provided', <Called party name> = 'JOHNSON' and <Called party firstname> = 'Tim'. (**in all cases**) {CC-INFO} with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> a3 [TS_1 <> IUT] End-to-end U-plane connection s4 [USR >> IUT] Hang up on IUT a4 [IUT >> TS_1] {**CC-RELEASE**} message s5.1 [TS_1 >> IUT] {**CC-RELEASE-COM**} message s5.2 [TS_1 >> IUT] {**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = 0, - addition, entry id = first entry id, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/All Calls List' and - event multiplicity = 31 - IE << CALL INFORMATION>> with value (0, 0, lid0). s5.3 [TS_1 >> IUT] (*Tester supports NG1.N.16_18 "Outgoing calls list"*) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION>> with: - event type/subt of 'List change ind/Outgoing Calls List' - event multiplicity = 11 - IE << CALL INFORMATION>> with value (0, 0, lid0).
Pass criteria:	Verify all answers In a2, and in case there is no <<MULTI-KEYPAD>> IE in the message, substring s1 shall still be defined, but as the empty string. After a3, verify that the <<CALLED PARTY NAME>> and <<CALLED PARTY NUMBER>> are correctly handled by the PP.

Comments:	

TC_PT_GAP.N.1_BV_103	{CC-SETUP} crossing - outgoing voice call from IUT - crossing incoming voice call - incoming call restarted
Test purpose:	The following steps are performed: 1- IUT initiates outgoing call towards Phone A on line 0 2- Tester (FT) immediately answers with a crossing incoming call 3- Abnormal release of both calls 4- Tester (FT) restarts the incoming call within timer P-<CC.06>
Reference:	EN 300 175-5 [5], clause 9.5.2.3
Initial condition:	One PP is registered to the FP. IUT is NG PP1, TS_1 is NG FP. NG PP1 is attached to line 0 only T-00
Time sequence:	s1 [USR >> IUT] 1- IUT initiates outgoing call towards Phone A on line 0 a1 [IUT >> TS_1] {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv2>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > 2- Tester (FT) immediately answers with a crossing incoming call s2 [TS_1 >> IUT] {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=1>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - << CALLING PARTY NUMBER =<National number, National standard plan, '987654321098'> >> - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)> 3- Abnormal release of both calls a2 [IUT >> TS_1] {**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=1>> - <<RELEASE-REASON code='Insufficient resources'>> s3.1 [TS_1 >> IUT] {**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv2>> - <<RELEASE-REASON code='Insufficient resources'>> 4- Tester (FT) restarts the incoming call within timer P-<CC.06> s3.2 [TS_1 >> IUT] (*Restart call at timeout × 75%*) {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=3 >> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - << CALLING PARTY NUMBER =<National number, National standard plan, '987654321098'> >> - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)> a3.1 [IUT >> TS_1] {**CC-ALERTING**} message with: - <<TRANSACTION IDENTIFIER flag=1, value= 3 >> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a3.2 [IUT >> USR] IUT is ringing a3.3 [IUT >> USR] IUT is presenting the CLIP to the user, displaying '987654321098'. s4 [USR >> IUT] Call is picked up a4 [IUT >> TS_1] {**CC-CONNECT**} message with: - <<TRANSACTION IDENTIFIER flag=1, value= 3>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> s5.1 [TS_1 >> IUT] {**CC-CONNECT-ACK**} message with: - <<TRANSACTION IDENTIFIER flag=0, value= 3>>

			- <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	s5.2	[TS_1 >> IUT]	{**CC-INFO**} message with: - <<TRANSACTION IDENTIFIER flag=0, value= 3>> - <<CALL-INFORMATION>> specifying: (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)>
	a5	[IUT <> TS_1]	End-to-end U-plane connection
	s6	[USR >> IUT]	Hang up
	a6	[IUT >> TS_1]	{**CC-RELEASE**} message - <<TRANSACTION IDENTIFIER flag=1, value=3>>
	s7	[TS_1 >> IUT]	{**CC-RELEASE-COM**} message - <<TRANSACTION IDENTIFIER flag=0, value=3>>
	a7		None
Pass criteria:	- Verify all answers - Verify that after s3.1 IUT does NOT restart the outgoing voice call.		
Comments:	At s3.2, when the incoming call is restarted, the FP is free to use another transaction value. It therefore uses value 3 here (after using value 1 in s2).		

6.41 TC_PT_GAP.N.8 Incoming call

No test.

6.42 TC_PT_NG1.N.23 Line and Diagnostic Test Cases

NOTE 1: The Read entries command shown in these test cases may include other entries and field identifiers as well as the expected ones. Furthermore, the expected entries and field identifiers may be requested through several uses of the command.

NOTE 2: "<<BASIC SERVICE **LiA**>> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE with <Call class> = LiA service setup and <Basic service> = Wideband speech default setup attributes".

TC_PT_NG1.N.23_BV_101	Display of line use and handset use statuses of a line - Another PP makes 2 calls on it		
Test purpose:	Line 0 is a multiple calls line. One PP makes two calls on it 1- At power on, PP2 is in use on line 0: 1st external call on line 0, in-use as a result 2- PP2 makes a 2nd external call on line 0, line 0 busy as a result		
Reference:	TS 102 527-5 [15], clause 7.4.34.2		
Initial condition:	Two PPs registered (IUT is NG PP1, TS_1 is NG FP + NG PP2) NG PP1 is registered as handset 1 attached to line 0 NG PP2 is registered as handset 2 attached to line 0 **Line and Diagnostic Statuses List** has two entries: 1- **Line id = 0**, OK status = up, Line use status = **Line is in-use** (01H), handset use =(**nb=1, bitmap = 00000010B**), Call Forwarding status = all deactivated, Diagnostic error status = (no,0,0). 2- **Line id = 'None'**, OK status=up, Diagnostic error status=(no,0,0).		
Time sequence:			1- At power on of IUT PP2 is in use on Line 0.
	s1.1	[USR >> IUT]	Power on IUT
	s1.2	[TS_1 >> IUT]]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = Line use indication/**line is in-use** (01H) - event multiplicity = Line 0 (00H) - event type/subtype = **Handset use status indication**/0 - event multiplicity = Line 0 (00H)
	s1.3	[USR >> IUT]	USR opens the Line and Diagnostic Statuses List
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s2.	[TS_1 >> IUT]	{**CC-CALL-PROC**} message

	a2. [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s3. [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=1, total number = 2, discriminator type = 0 >
	a3 [IUT >> TS_1]	<**Read entries**, session id=1, start index = s, direction = d, counter = c, list entry field ids 1..n including at least 03H, 04H>; s,d,c chosen so that entries with indices 1,2 at least are read.
	s4 [TS_1 >> IUT]	<**Read entries confirm,** session id=1, start index=1, Partial delivery/Counter = 02H>, followed by: <**data packet/data packet last**> with the two list entries
	a4 [IUT]	The displayed statuses indicate that PP2 is using line 0.
	s5 [TS_1 >> IUT]	<**End session,** session id=1>
	a5 [IUT >> TS_1]	<**End session confirm,** session id=1>
	s6 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a6 [IUT >> TS_1]	{**CC-RELEASE**} message
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a7	None
		2- PP2 makes a 2nd external call on line 0
	s8.1 [TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = 0 entry**: - Line use status = Line or system is busy - *(No change of the handset use status)*
	s8.2 [TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with - event type/subt. = Line use ind./**line or system is busy** (02H), - event multiplicity = Line 0 (00H)
	s8.3 [USR >> IUT]	USR opens the Line and Diagnostic Statuses List
	a8 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s9 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a9 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s10 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=2, total number = 2, discriminator type = 0>
	a10 [IUT >> TS_1]	<**Read entries**, session id=2, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 03H, 04H>; s,d,c chosen so that entries with indices 1,2 at least are read.
	s11 [TS_1 >> IUT]	**<Read entries confirm,** session id=2, start index = 1, Partial delivery/Counter = 02H followed by: **<data packet/data packet last>** with the two list entries
	a11 [IUT >> USR]	The displayed statuses indicate that PP2 is using line 0 and that line 0 is busy as a result.
	s12 [TS_1 >> IUT]	<**End session,** session id=2>
	a12 [IUT >> TS_1]	<**End session confirm,** session id=2>
	s13 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a13 [IUT >> TS_1]	{**CC-RELEASE**} message
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a14	None
Pass criteria:	- Verify all answers.	
Comments:	A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated FACILITY message step. In a3 and a10, IUT user is requested to read field 03H (line use status) although its value is already known by the PP through the previous notification.	

TC_PT_NG1.N.23_BV_102	Display of line use/handset use statuses of a line - 2 other PPs make each one call on it
Test purpose:	Line 0 is a multiple calls line. Two PPs make a call on it 1- At power on, PP3 is in use on line 0: 1st external call on line 0, in-use as a result

	2- PP2 also becomes in use on line 0: 2nd external call on line 0, busy as a result
Reference:	TS 102 527-5 [15], clause 7.4.34.2
Initial condition:	Three PPs registered (IUT is NG PP1, TS_1 is NG FP + NG PP2 + NG PP3) NG PP1 is registered as handset 1 attached to line 0 NG PP2 is registered as handset 2 attached to line 0 NG PP3 is registered as handset 3 attached to line 0 **Line and Diagnostic Statuses List** has two entries: 1- **Line id = 0**, OK status = up, Line use status = **Line is in-use** (01H), handset use =(**nb=1, bitmap = 00000100B**), Call Forwarding status = all deactivated, Diagnostic error status = (no,0,0). 2- **Line id = 'None'**, OK status=up, Diagnostic error status=(no,0,0).
Time sequence:	1- At power on of IUT PP3 is in use on Line 0. s1.1 [USR >> IUT] Power on IUT s1.2 [TS_1 >> IUT]] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = Line use indication/**line is in-use** (01H) - event multiplicity = Line 0 (00H) - event type/subtype = **Handset use status indication**/0 - event multiplicity = Line 0 (00H) s1.3 [USR >> IUT] USR opens the Line and Diagnostic Statuses List a1 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE s2. [TS_1 >> IUT] {**CC-CALL-PROC**} message a2. [IUT >> TS_1] <**Start session**, List id = Line and Diagnostic Statuses List> s3. [TS_1 >> IUT] <**Start session confirm**, List id = 0aH, session id=1, total number = 2, discriminator type = 0 > a3 [IUT >> TS_1] <**Read entries**, session id=1, start index = s, direction = d, counter = c, list entry field ids 1..n including at least 03H, 04H>; s,d,c chosen so that entries with indices 1,2 at least are read. s4 [TS_1 >> IUT] **<Read entries confirm,** session id=1, start index = 1, Partial delivery/Counter = 02H, followed by: **<data packet/data packet last>** with the two list entries a4 [IUT] The displayed statuses indicate that handset 3 is using line 0. s5 [TS_1 >> IUT] <**End session,** session id=1> a5 [IUT >> TS_1] <**End session confirm,** session id=1> s6 [USR >> IUT] Close Line and Diagnostic Statuses List a6 [IUT >> TS_1] {**CC-RELEASE**} message s7 [TS_1 >> IUT] {**CC-RELEASE-COM**} message a7 None 2- PP 2 also becomes in use on line 0 (external call) s8.1 [TS_1] The Line and Diagnostic Statuses List changes as follows: - **Line id = 0 entry**: - Line use status = Line or system is busy - Handset use status = (nb=2, bitmap=00000110B) s8.2 [TS_1 >> IUT] {**FACILITY**} message with <<Events notification>> IE with - event type/subt. = Line use ind./**line or system is busy** (02H), - event multiplicity = Line 0 (00H) - event type/subtype = **handset use status indication**/0 - event multiplicity = Line 0 (00H) s8.3 [USR >> IUT] USR opens the Line and Diagnostic Statuses List a8 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE s9 [TS_1 >> IUT] {**CC-CALL-PROC**} message a9 [IUT >> TS_1] <**Start session**, List id = Line and Diagnostic Statuses List> s10 [TS_1 >> IUT] <**Start session confirm**, List id = 0aH, session id=2, total number = 2, discriminator type = 0> a10 [IUT >> TS_1] <**Read entries**, session id=2, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 03H, 04H>; s,d,c chosen so that entries with indices 1,2 at least are read.

	s11 [TS_1 >> IUT]	**<Read entries confirm,** session id=2, start index = 1, Partial delivery/Counter = 02H followed by: **<data packet/data packet last>** with the two list entries
	a11 [IUT >> USR]	The displayed statuses indicate that handsets 2 and 3 are both using line 0 and that line 0 is busy as a result.
	s12 [TS_1 >> IUT]	<**End session,** session id=2>
	a12 [IUT >> TS_1]	<**End session confirm,** session id=2>
	s13 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a13 [IUT >> TS_1]	{**CC-RELEASE**} message
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a14	None
Pass criteria:	- Verify all answers.	
Comments:	A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated FACILITY message step.	

TC_PT_NG1.N.23_BV_103	Display of line use and handset use statuses (multiple lines)	
Test purpose:	Another PP (NG PP3) makes two calls on two different lines. Line 0 is a multiple calls line; Line 1 is a single call line. 1- At power on, there is one handset in use on line 0 (handset 2) 2- Handset 2 makes a second external call on line 1	
Reference:	TS 102 527-5 [15], clause 7.4.34.2	
Initial condition:	Two PPs registered (IUT is NG PP1, TS_1 is NG FP + NG PP2) NG PP1 is registered as handset 1 attached to line 0 and line 1 NG PP2 is registered as handset 2 attached to line 0 and line 1 **Line and Diagnostic Statuses List** has four entries: 1- **Line id = 0**, OK status = up, Line use status = **Line is in-use** (01H), **handset use = (nb= 1, bitmap = 00000010B)**, Call Forwarding status = all deactivated, Diagnostic error status=(no,0,0). 2- **Line id = 1**, OK status = up, Line use status = Line is idle, handset use = (nb=0, bitmap = 00000000B), Call Forwarding status = all deactivated, Diagnostic error status=(no,0,0). 3- **Line id = 2**, OK status = up, Line use status = Line is idle, handset use = (nb=0, bitmap = 00000000B), Call Forwarding status = all deactivated, Diagnostic error status=(no,0,0). 4- **Line id = 'None'**, OK status=up, Diagnostic error status=(no,0,0).	
Time sequence:		1- At power on, there is one handset in use on line 0 (PP2)
	s1 [USR >> IUT]	Power on IUT
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=1, total number = 4, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 03H,04H>; s,d,c chosen so that entries with indices 1,2,3 at least are read.
	s4 [TS_1 >> IUT]	**<Read entries confirm,** session id=1, start index = 1, Partial delivery/Counter ≥ 03H> followed by a series of: **<data packet/data packet last>** with the content of the line use and handset use statuses for lines 0, 1 and 2
	a4 [IUT]	The displayed statuses indicate that only handset 2 is in use, and that it is in use on line 0.
	s5 [TS_1 >> IUT]	<**End session**, session id=1>
	a5 [IUT >> TS_1]	<**End session confirm**, session id=1>

	s6 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a6 [IUT >> TS_1]	{**CC-RELEASE**}
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
	a7	None
		2- PP2 makes a second external call on line 1.
	s8.1 [TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = 0 and 2 entries**: no change - **Line id = 1 entry**: - Line use status = Line or system is busy - Handset use status = (nb=1, bitmap=00000010B)
	s8.2 [TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subt. = Line use ind./line or system is busy (02H), - event multiplicity = Line 1 (01H) - event type/subtype = Handset use status indication/0 - event multiplicity = Line 1 (01H)
	s8.3 [USR >> IUT]	USR opens Line and Diagnostic Statuses List
	a8 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s9 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a9 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s10 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=2, total number = 4, discriminator type = 0>
	a10 [IUT >> TS_1]	<**Read entries**, session id=2, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 03H,04H>; s,d,c chosen so that entries with indices 1,2,3 at least are read.
	s11 [TS_1 >> IUT]	**<Read entries confirm,** session id=2, start index=1, Partial delivery/Counter ≥ 03H > followed by a series of: - **<data packet/data packet last>** with the content of the line use and handset use statuses for lines 0, 1 and 2
	a11 [IUT >> USR]	The displayed statuses indicate that only handset 2 is in use, and that it is in use on line 0 and on line 1.
	s12 [TS_1 >> IUT]	<**End session**, session id=2>
	a12 [IUT >> TS_1]	<**End session confirm**, session id=2>
	s13 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a13 [IUT >> TS_1]	{**CC-RELEASE**}
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
Pass criteria:	- Verify all answers.	
Comments:	A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated FACILITY message step.	

TC_PT_NG1.N.23_BV_104	Display of call forwarding status (multiple lines)
Test purpose:	Test that PP correctly displays the call forwarding statuses. Line 0 is a single call line. Handset 3 is all along involved in an external call (so line 0 is all along busy). 1- At power on, CFU is activated on line 0, and PP3 is involved in a call on line 0 2- CFU and CFB are activated on line 2
Reference:	TS 102 527-5 [15], clause 7.4.34.2
Initial condition:	Three PPs registered (IUT is NG PP1, TS_1 is NG FP + NG PP3 + NG PP5). NG PP1 (IUT) is registered as handset 1 attached to lines 0 and 2 NG PP3 is registered as handset 3 attached to line 0 and is involved in a call on line 0 NG PP5 is registered as handset 5 attached to line 1 and 2 **Line and Diagnostic Statuses List** has four entries: 1- **Line id = 0**, OK status = up, **Line use status = Line or system is busy (02H)**, **handset use=(nb=1, bitmap=00000100B)**, **Call Forwarding status = (CFU activated, CFNA and CFB deactivated)**, Diagnostic error status =(no,0,0). 2- **Line id = 1**, OK status = up, Line use status = Line is idle, handset use=(nb=0, bitmap = 00000000B), Call Forwarding status = all deactivated, Diagnostic error status=(no,0,0). 3- **Line id = 2**, OK status = up, Line use status = Line is idle, handset use=(nb=0, bitmap = 00000000B), Call Forwarding status = all deactivated, Diagnostic error status=(no,0,0). 4- **Line id = 'None'**, OK status=up, Diagnostic error status=(no,0,0). **Line Settings List** contains: 1- Line name = 'zero', Line id = 0, attached handsets = (nb=2, bitmap = 00000101B), Multiple calls mode = single call mode, **CFU activated**, CFNA,CFB all deactivated. 2- Line name = 'one', Line id = 1, attached handsets = (nb=1, bitmap = 000010000B), Multiple calls mode = single call mode, CFU, CFNA,CFB all deactivated. 3- Line name = 'two', Line id = 2, attached handsets = (nb=2, bitmap = 00010001B), Multiple calls mode = single call mode, CFU, CFNA,CFB all deactivated.
Time sequence:	1- At power on, CFU is activated on line 0, PP3 is involved in a call on line 0
	s1.1 [TS_1 >> IUT] {**FACILITY**} message with <<Events notification>> IE with - event type/subtype = Line use indication/**line is in-use** (01H) - event multiplicity = Line 0 (00H) - event type/subtype = handset use status indication/0, - event multiplicity = Line 0 (00H) - event type/subtype = diagnostic indication/line related change, - event multiplicity = Line 0 (00H)
	s1.2 [USR >> IUT] USR opens Line and Diagnostic Statuses List
	a1 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message
	a2 [IUT >> TS_1] <**Start session**, List id = Line and Diagnostic Statuses List>
	s3 [TS_1 >> IUT] <**Start session confirm**, List id = 0aH, session id=1, total number=4, discriminator type=0>
	IUT shall loop over a3, s4 below (possibly only once) and chose s,d,c so that entries for line 0 and 2 at least shall be read and their respective Call Forwarding statuses received:
	a3 [IUT >> TS_1] <**Read entries**, session id=1, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 05H>;
	s4 [TS_1 >> IUT] <**Read entries confirm**, session id=1, start index = 1, partial delivery=0, counter ≤ c>, followed by a series of <**data packet/data packet last**>'s
	a4 [IUT >> USR] The displayed statuses indicate at least that: - line 0 has CFU activated, and CFNA and CFB deactivated; - line 2 has CFU, CFNA, CFB deactivated. A global 'Call forwarding Activated' icon may optionally be displayed.
	s5 [TS_1 >> IUT] <**End session**, session id=1>
	a5 [IUT >> TS_1] <**End session confirm**, session id=1>
	s6 [USR >> IUT] Close Line and Diagnostic Statuses List

	a6 [IUT >> TS_1]	{**CC-RELEASE**}
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
	a7	None
		2- CFU and CFB are activated on line 2
	s8.1 [TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = 2 entry**: - Call forwarding status = CFU on, CFNA off, CFB on
	s8.2 [TS_1]	The Line Settings List changes as follows: - **Line id = 2 entry**: - CFU activated - CFB activated
	s8.3 [TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 2 (02H)
	s8.4 [USR >> IUT]	USR opens Line and Diagnostic Statuses List
	a8 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s9 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a9 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s10 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=2, total number=4, discriminator type = 0>
		IUT shall loop over a10, s11 below (possibly only once) and chose s,d,c so that entries for line 0 and 2 at least shall be read and their respective Call Forwarding statuses received:
	a10 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, list entry field ids 1..n including at least 05H>;
	s11 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index = 1, partial delivery=0, counter ≤ c>, followed by a series of <**data packet/data packet last**>'s
	a11 [IUT >> USR]	The displayed statuses indicate at least that: - that line 0 has CFU activated, and CFNA, CFB deactivated; - that line 2 has CFU and CFB activated and CFNA deactivated. A global 'Call forwarding Activated' icon may optionally be displayed.
	s12 [TS_1 >> IUT]	<**End session**, session id=2>
	a12 [IUT >> TS_1]	<**End session confirm**, session id=2>
	s13 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a13 [IUT >> TS_1]	{**CC-RELEASE**}
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
Pass criteria:	- Verify all answers.	
Comments:	The IUT may display the status for line 1. A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated {FACILITY} message step. The notifications for the Line Settings List are not tested.	

TC_PT_NG1.N.23_BV_105	Display of diagnostic error status (multiple lines) - line related error
Test purpose:	Test that PP correctly displays the diagnostic error status 1- At power on, there is no error ('OK status' for system and for lines 0,1,2 are 'up') 2- Line 0 suffers an unknown (line-related) error (i.e. with OK status ='down' and diagnostic error status =(no, 0,0) 3- Line 0 (line-related) diagnostic error status changes to (yes, type= Network error, number = WAN error) (while OK status is still 'down') 4- Line 2 suffers a (line-related) error (OK status='down' and diagnostic error status =(yes, Local error, Cable error)
Reference:	TS 102 527-5 [15], clause 7.4.34.2
Initial condition:	IUT is registered to TS_1 (NG FP) as handset 1 and is attached to lines 0 and 2 **Line and Diagnostic Statuses List** has four entries: 1- **Line id = 0**, OK status = up, Line use status = Line idle, handset use status=(nb=0, bitmap=00000000B), Call Forwarding status = all deactivated, Diagnostic error status= ('no', 0, 0) 2- **Line id = 1**, OK status = up, Line use status = Line is idle, handset use status=(nb=0, bitmap=00000000B), Call Forwarding status = all deactivated, Diagnostic error status= ('no', 0, 0) 3- **Line id = 2**, OK status = up, Line use status = Line is idle, handset use status=(nb=0, bitmap=00000000B), Call Forwarding status = all deactivated, Diagnostic error status= ('no', 0, 0) 4- **Line id = 'None'**, OK status = up, Diagnostic error status=('no', 0, 0)
Time sequence:	1- At power on, there is no error s1 [USR >> IUT] Power on IUT a1 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA** >> IE s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id = Line and Diagnostic Statuses List, > s3 [TS_1 >> IUT] <**Start session confirm**, List id = 0aH, session id=1, total number=3, discriminator type=0> a3 [IUT >> TS_1] <**Read entries**, session id=1, start index=s, direction=d, counter=c, field ids 1..n including at least 01H 02H 06H>; s,d,c chosen so that entries with indices 1,2,3,4 at least are read. s4 [TS_1 >> IUT] **<Read entries confirm,** session id=1, start index = 1, Partial delivery/Counter=04H followed by a series of: **<data packet/data packet last>**'s with the content of the diagnostic status for the system and for lines 0,1 and 2 a4 [IUT] The entry content is displayed correctly: - the system has no error - lines 0 and 2 have no error s5 [TS_1 >> IUT] <**End session**, session id=1> a5 [IUT >> TS_1] <**End session confirm**, session id=1> s6 [USR >> IUT] Close Line and Diagnostic Statuses List a6 [IUT >> TS_1] {**CC-RELEASE**} s7 [TS_1 >> IUT] {**CC-RELEASE-COM**} a7 None 2- Line 0 suffers an unknown line-related diagnostic error s8.1 [TS_1] The Line and Diagnostic Statuses List changes as follows: - **Line id = 0 entry**: - OK status = down - Diagnostic error status = ('no', 'Unknown', 'Unknown') s8.2 [TS_1 >> IUT] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change - event multiplicity = line 0 (00H) s8.3 [USR >> IUT] USR opens Line and Diagnostic Statuses List a8 [IUT >> TS_1] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE s9 [TS_1 >> IUT] {**CC-CALL-PROC**} message a9 [IUT >> TS_1] <**Start session**, List id = Line and Diagnostic Statuses List>

s10	[TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=2, total number = 4, discriminator type = 0>
a10	[IUT >> TS_1]	<**Read entries**, session id=2, start index=s, direction=d, counter=c, field ids 1..n including at least 01H 02H 06H>; s,d,c chosen so that entry with indices 1,2,3,4 at least are read.
s11	[TS_1 >> IUT]	**<Read entries confirm,** session id=2, start index = 1, Partial delivery/Counter = 04H followed by a series of: - **<data packet/data packet last>**'s with the content of the diagnostic status for the system, and for lines 0,1 and 2
a11	[IUT >> USR]	The entries content is displayed correctly: - the system has no error - line 0 has an Unknown diagnostic error with user possibly referred to FP instructions for use - line 2 has no error
s12	[TS_1 >> IUT]	<**End session**, session id=2>
a12	[IUT >> TS_1]	<**End session confirm**, session id=2>
s13	[USR >> IUT]	Close Line and Diagnostic Statuses List
a13	[IUT >> TS_1]	{**CC-RELEASE**}
s14	[TS_1 >> IUT]	{**CC-RELEASE-COM**}
a14		None
		3- Line 0 diag. error changes to line rel. Network error/WAN error
s15.1	[TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = 0 entry**: - OK status = down (*no change here*) - Diagnostic error st. = ('yes', 'Network error', 'WAN error')
s15.2	[TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 0 (00H)
s15.3	[USR >> IUT]	USR opens Line and Diagnostic Statuses List
a15	[IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
s16	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
a16	[IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
s17	[TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=3, total number=4, discriminator type=0>
a17	[IUT >> TS_1]	<**Read entries**, session id=3, start index=s, direction=d, counter=c, field ids 1..n including at least 01H 02H 06H>; s,d,c chosen so that entry with indices 1,2,3,4 at least are read.
s18	[TS_1 >> IUT]	**<Read entries confirm,** session id=3, start index = 1, Partial delivery/Counter = 04H followed by a series of: - **<data packet/data packet last>**'s with the content of the diagnostic status for the system and for lines 0,1 and 2
a18	[IUT >> USR]	The entries content is displayed correctly: - the system has no error - line 0 has a Network error with: - either error number meaning displayed ('WAN error') - or error number (01H) only displayed and user referred to FP instructions for use - line 2 has no error.
s19	[TS_1 >> IUT]	<**End session**, session id=3>
a19	[IUT >> TS_1]	<**End session confirm**, session id=3>
s20	[USR >> IUT]	Close Line and Diagnostic Statuses List
a20	[IUT >> TS_1]	{**CC-RELEASE**}
s21	[TS_1 >> IUT]	{**CC-RELEASE-COM**}
a21		None
		4- Line 2 suffers a line related Local error/Cable error
s22.1	[TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = 2 entry**: - OK status = down

		- Diagnostic error st. = ('yes', 'Local error', 'Cable error')
	s22.2[TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 2 (02H)
	s22.3 [USR >> IUT]	USR opens Line and Diagnostic Statuses List
	a22 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s23 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a23 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s24 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=4, total number = 4, discriminator type = 0>
	a24 [IUT >> TS_1]	<**Read entries**, session id=4, start index=s, direction=d, counter=c, field ids 1..n including at least 01H 02H 06H>; s,d,c chosen so that entry with indices 1,2,3,4 at least are read.
	s25 [TS_1 >> IUT]	**<Read entries confirm,** session id=4, start index = 1, Partial delivery/Counter = 04H followed by a series of: - **<data packet/data packet last>**'s with the content of the diagnostic status for the system and for lines 0,1 and 2
	a25 [IUT >> USR]	The entries content is displayed correctly: - system has no error - line 0 has a Network error with number 01H (WAN error) - line 2 has a Local error with number 04H (Cable error) - user referred to FP instructions for use at least if error number meaning is not explicitly indicated by the FP.
	s26 [TS_1 >> IUT]	<**End session**, session id=4>
	a26 [IUT >> TS_1]	<**End session confirm**, session id=4>
	s27 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a27 [IUT >> TS_1]	{**CC-RELEASE**}
	s28 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
	a28	None
Pass criteria:	- Verify all answers.	
Comments:	- The IUT may display the status for line 1. - For the list entry with line id = None, the Line use, Handset use and Call Forwarding statuses are irrelevant and corresponding fields shall have minimum length. A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated FACILITY message step.	

TC_PT_NG1.N.23_BV_106	Display of diagnostic error status (multiple lines) - non line-related error
Test purpose:	Test that PP correctly displays the diagnostic error status 1- At power on, there is no error ('OK status' for system and for lines 0,1,2 are 'up') 2- An error occurs that impacts both the system and the 3 lines. Diagnostic is known only for the system (Local LAN error) 3- Non-line related diagnostic error being cleared (with lines again 'up')
Reference:	TS 102 527-5 [15], clause 7.4.34.2
Initial condition:	IUT is registered to TS_1 (NG FP) as handset 1 and is attached to lines 0 and 2 **Line and Diagnostic Statuses List** has four entries: 1- **Line id = 0**, OK status = up, Line use status = Line idle, number of handsets = 0, handset bitmap = 00000000B, Call Forwarding status = all deactivated, Diagnostic error status= ('no', 0, 0). 2- **Line id = 1**, OK status = up, Line use status = Line is idle, number of handsets = 0, handset bitmap = 00000000B, Call Forwarding status = all deactivated, Diagnostic error status= 'up' (no error), type/number=0/0. 3- **Line id = 2**, OK status = up, Line use status = Line is idle, number of handsets = 0, handset bitmap = 00000000B, Call Forwarding status = all deactivated, Diagnostic error status= ('no', 0, 0).

4- **Line id = 'None'**, OK status=up, Diagnostic error status=('no', 0, 0).

Time sequence:

1- At power on, there is no error

s1	[USR >> IUT]	Power on IUT
a1	[IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
s2	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
a2	[IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List, >
s3	[TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=1, total number=4, discriminator type=0>
a3	[IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, field ids 1..n including at least 01H 02H 06H>; s,d,c chosen so that entries with indices 1,2,3,4 at least are read.
s4	[TS_1 >> IUT]	**<Read entries confirm,** session id=1, start index = 1, Partial delivery/Counter = 04H> followed by a series of: **<data packet/data packet last>**'s with the content of the diagnostic status for the system and for lines 0,1 and 2
a4	[IUT]	The entry content is displayed correctly: - the system has no error - that lines 0 and 2 have no error
s5	[TS_1 >> IUT]	<**End session**, session id=1>
a5	[IUT >> TS_1]	<**End session confirm**, session id=1>
s6	[USR >> IUT]	Close Line and Diagnostic Statuses List
a6	[IUT >> TS_1]	{**CC-RELEASE**}
s7	[TS_1 >> IUT]	{**CC-RELEASE-COM**}
a7		None

2- A non-line related Local error(02H)/LAN error(01H) occurs

s8.1	[TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = None entry**: - OK status='down' - Diagnostic error status= ('yes', 'Local error', 'LAN error') - **Line id = 0, 1 and 2 entries**: - OK status = 'down' - Diagnostic error status= ('no', 0, 0) (*no change here*)
s8.2	[TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subt.=diagnostic ind./non-line related change (02H), - event multiplicity = don't care
s8.3	[USR >> IUT]	USR opens Line and Diagnostic Statuses List
a8	[IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
s9	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
a9	[IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
s10	[TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=2, total number=4, discriminator type=0>
a10	[IUT >> TS_1]	<**Read entries**, session id=2, start index=1, direction=d, counter=c, list entry field ids including at least 01H 02H 06H>; s,d,c chosen so that entries with indices 1,2,3,4 at least are read
s11	[TS_1 >> IUT]	**<Read entries confirm,** session id=2, start index=1, Partial delivery/Counter=04H> followed by a series of: **<data packet/data packet last>**'s with (at least) the content of the diagnostic status for the system and for lines 0,1 and 2
a11	[IUT >> USR]	The entry content is displayed correctly: - the system has a Local error with number 01H (LAN error) - user referred to FP instructions for use at least if error number meaning is not explicitly indicated by the FP. - Lines 0 and 2 are down. Line 1 down may also be indicated.
s12	[TS_1 >> IUT]	<**End session**, session id=2>
a12	[IUT >> TS_1]	<**End session confirm**, session id=2>
s13	[USR >> IUT]	Close Line and Diagnostic Statuses List

	a13 [IUT >> TS_1]	{**CC-RELEASE**}
	s14 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
	a14	None
		3- Non-line related diag. error being cleared (with lines again up)
	s15.1 [TS_1]	The Line and Diagnostic Statuses List changes as follows: - **Line id = None entry**: - OK status='up' - Diagnostic error status= ('no', 0, 0) - **Line id = 0, 1 and 2 entries**: - OK status = 'up' - Diagnostic error status= ('no', 0, 0) (*no change here*)
	s15.2[TS_1 >> IUT]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 0 (00H) - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 1 (01H) - event type/subtype = diagnostic indication/line related change, - event multiplicity = line 2 (02H)
	s15.3 [USR >> IUT]	USR opens Line and Diagnostic Statuses List
	a15 [IUT >> TS_1]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	s16 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a16 [IUT >> TS_1]	<**Start session**, List id = Line and Diagnostic Statuses List>
	s17 [TS_1 >> IUT]	<**Start session confirm**, List id = 0aH, session id=3, total number=3, discriminator type=0>
	a17 [IUT >> TS_1]	<**Read entries**, session id=3, start index=s, direction=d, counter=c, field ids including at least 01H 06H>; s,d,c chosen so that entries with indices 1,2,3,4 at least are read
	s18 [TS_1 >> IUT]	**<Read entries confirm,** session id=3, start index = 1, Partial delivery/Counter = 04H> followed by a series of: **<data packet/data packet last>**'s with the content of the diagnostic status for the system and for lines 0,1 and 2
	a18 [IUT >> USR]	The entry content is displayed correctly: - the system has no error - that lines 0 and 2 have no error
	s19 [TS_1 >> IUT]	<**End session**, session id=3>
	a19 [IUT >> TS_1]	<**End session confirm**, session id=3>
	s20 [USR >> IUT]	Close Line and Diagnostic Statuses List
	a20 [IUT >> TS_1]	{**CC-RELEASE**}
	s21 [TS_1 >> IUT]	{**CC-RELEASE-COM**}
	a21	None
Pass criteria:	- Verify all answers.	
Comments:	The IUT may display the status for line 1. In s15.1, TS_1 sends a diagnostic indication also for line 1, as a FP is required to send line related indications *at least* to all PPs attached to the concerned line. A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown and after the associated FACILITY message step.	

6.43 TC_PT_NG1.N.24 Short Messaging Services (SMS) Test Cases

NOTE: "<<BASIC SERVICE **LiA**>> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE with <Call class> = LiA service setup and <Basic service> = Wideband speech default setup attributes".

TC_PT_NG1.N.24_BV_101	List of Supported Lists - SMS service checked for	
Test purpose:	Test that the PP checks for the SMS service before trying to use it	
Reference:	TS 102 527-5 [15], clause 7.4.35.1	
Initial condition:	IUT is registered to TS_1 (NG FP) IUT is in state T-00	
		Try to use the SMS service
Time sequence:	s1 [USR >> IUT]	Open the Incoming SMS List.
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id = 00H denoting List of Supported Lists>
	s3 [TS_1 >> IUT]	<**Start session confirm**, List identifier = 00H, session id=1, total number = 1, discriminator type = 0>
	a3 [IUT >> TS_1]	<**Read entries**, session id = 1, start index=1, direction=0, counter=1, mark entries request = don't care, list entry field identifier = 01H>
	s4 [TS_1 >> IUT]	For each <**Read entries**> received: <**Read entries confirm**, session id=1, start index=1, counter=1>, followed by <**data packet/data packet last**> containing the 'List identifiers' field including at least the following list identifiers: 0BH SMS Settings List 0CH Incoming SMS List 0DH Sent SMS List 0EH Outgoing SMS List 0FH Draft SMS List
	a4 [IUT >> TS_1]	<**Start session**, List identifier = 03H denoting Incoming SMS List'>
	s5 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a5 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' step. However, the PP has to read the list prior to the step in which the 'Read entries' command is sent. In a4, not all FPs allow two LiA sessions open simultaneously. The IUT may send an 'End session' for the first LiA session and then a 'Start session' to start the next LiA session.	

TC_PT_NG1.N.24_BV_301	Draft SMS List - PP sending of short message in draft list
Test purpose:	Test correct operation of the PP when sending a short message using the draft list 1- Open the Draft SMS List 2- Create a new message in the Draft SMS list (with 'Sending request' unset) 3- Send the short message saved in step 2 (by setting the 'Sending request' field)
Reference:	TS 102 527-5 [15], clause 7.4.35.3
Initial condition:	IUT is registered to TS_1 (NG FP) The Draft SMS List is empty PT_IXIT_9 (PT Side Short Message Editing) is "Not supported". Otherwise test TC_PT_NG1.N.24_BV_302 shall be performed instead. IUT is in state T-00
Time sequence:	s1 [USR >> IUT] 1- Open the **Draft SMS List**. a1.1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1.2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a1.3 [IUT >> TS_1] <**Start session**, List id = 0FH (Draft SMS List)> s2 [TS_1 >> IUT] <**Start session confirm**, List id = 0FH, session id=s> 2- Create a new message in the Draft SMS list a2.1 [IUT >> TS_1] <**Save entry**, session id=s, entry id=0> a2.2 [IUT >> TS_1] <**data packet/data packet last**, session id=s, entry id = e, - Entry field 'Number'=00491603794505 - Entry field 'Name'= 'Markus UWE' - Entry field 'SMS service id'= 1 - Entry field 'Sending request' set to value 0, - Entry field 'Network side SMS encoding' set to either (0, 0, 0) (unknown)> or (4,0,0) (UTF-8)> - Entry field 'SMS content' with UTF-8 encoded string 'draft send'. s3.1 [TS_1 >> IUT] <**Save entry confirm**, session id=s, entry id=e> s3.2 [USR >> IUT] 3- Send the short message saved in step 2 a3.1 [IUT >> TS_1] <**Save entry**, session id=s, entry id=e> a3.2 [IUT >> TS_1] <**data packet/data packet last**, session id=s, entry id = e, - Entry field identifier 'Sending request' set to 1> s4.1 [TS_1 >> IUT] <**Save entry confirm**, session id=s, entry id=e> s4.2 [TS_1 >> IUT] {**CC-RELEASE**} message a4 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	In order to allow the IUT to consult in particular the 'Allowed SMS character encodings' field, TS_1 shall be prepared to open an LiA session with the "SMS Settings List" (either in a separate or in the same LiA service call, depending on PT_IXIT_8 value). The IUT may use a different sequence to store the short message in the draft list; the sequence shown is the shortest possible. A PP IUT which implements caching of lists may not need to read the list as expected in the above 'Read entries' steps. However, the PP has to read the list prior to the step in which the 'Read entries' command is shown.

TC_PT_NG1.N.24_BV_302	Outgoing SMS List - PP sending of short message in PP side editing list
Test purpose:	Test correct operation of the PP when sending a short message using a PP side editing list
Reference:	TS 102 527-5 [15], clause 7.4.35.3
Initial condition:	IUT is registered to TS_1 (NG FP) PT_IXIT_9 (PT Side Short Message Editing) is "Supported". Otherwise test TC_PT_NG1.N.24_BV_301 shall be performed instead. IUT is in state T-00
Time sequence:	s1 [USR >> IUT] 1- Compose and save locally a new short message with SMS content of 'PP side edit and send' 2- Send the short message saved in step 1 a1.1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1.2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a1.3 [IUT >> TS_1] <**Start session**, List id = 0EH> (Outgoing SMS List) s2 [TS_1 >> IUT] <**Start session confirm**, List id = 0EH, session id=s> a2 [IUT >> TS_1] <**Save entry**, session id=s, entry id=0> a3 [IUT >> TS_1] <**data packet/data packet last**, session id=s, entry id=e, - Entry field 'Number'=00491603794505 - Entry field 'Name'= 'Markus UWE' - Entry field 'SMS service id'= 1 - Entry field 'Network side SMS encoding' set to either (0, 0, 0) (unknown) or (4,0,0) (UTF-8)> - Entry field 'SMS content' with UTF-8 encoded string 'PP side edit and send', s3 [TS_1 >> IUT] <**Save entry confirm**, session id=s, entry id=e> s4 [TS_1 >> IUT] {**CC-RELEASE**} message a4 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	In order to allow the IUT to consult in particular the 'Allowed SMS character encodings' field, TS_1 shall be prepared to open an LiA session with the "SMS Settings List" (either in a separate or in the same LiA service call, depending on PT_IXIT_8 value). Saving the SMS in the Outgoing SMS List indicates to the FP that the SMS can be sent. The IUT may use a different sequence to save the short message in the Outgoing SMS List; the sequence shown is the shortest possible.

TC_PT_NG1.N.24_BV_601	Incoming SMS List - Indication to User of Receipt of Short Message		
Test purpose:	Test correct operation of the PP when a short message is received 1- Mimic a short message arrival from SMS service 's' 2- Mimic a short message arrival from SMS service 't' (with one existing read message) 3- Mimic the Incoming SMS List becoming empty for SMS service id s (one message deleted from NG PP2) 4- Mimic the Incoming SMS List becoming empty for SMS service id t (two messages deleted from NG PP2; list becomes empty)		
Reference:	TS 102 527-5 [15], clause 7.4.1.6		
Initial condition:	IUT (NG PP1) and NG PP2 are registered to TS_1 (NG FP) There is one read short message in the Incoming SMS List for SMS service 't' IUT is in state T-00 There are two SMS services with service ids 's' and 't' on the system, both using line 0.		
Time sequence:			1- Mimic a short message arrival from SMS service 's'
	s1	[TS_1 >> IUT]	<{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id = first entry id, position indicator=0 - IE <<**Events Notification**>> with: - event type/subytpe='SMS message'/'New SMS message arrived', - event multiplicity=1 unread message (01H); - event type/subytpe="List change indication'/Incoming SMS List - event multiplicity=1 message in total (01H); - and IE <<**Call information**>> IE with: - identifier type/subtype='Service identifier'/'SMS service identifier', - identifier value = s
	a1	[IUT >> USR]	The IUT indicates the SMS status (i.e. there is a message) to the user from SMS service s
			2- Mimic a short message arrival from SMS service 't'
	s1	[TS_1 >> IUT]	<{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id = first entry id, position indicator=0 - IE <<**Events Notification**>> with: - event type/subytpe='SMS message'/'New SMS message arrived', - event multiplicity=1 unread messages (01H); - event type/subtype="List change indication'/Incoming SMS List - event multiplicity=2 messages in total (02H); - and IE <<**Call information**>> with: - identifier type/subtype='Service identifier'/'SMS service identifier', - identifier value=t
	a1	[IUT >> USR]	The IUT indicates the SMS status (i.e. there is a message from SMS service t) to the user
			3- Mimic the Incoming SMS List becoming empty for SMS service id s
	s2	[TS_1 >> IUT]	<{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = NG PP2, - deletion, entry id = only entry id for SMS service s - IE <<**Events Notification**>> with: - event type/subtype='SMS message'/'No new SMS message', - event multiplicity=0 unread message (00H); - event type/subtype="List change indication'/Incoming SMS List - event multiplicity=0 message in total (00H); - and IE <<**Call information**>> with: - identifier type/subtype='Service identifier'/'SMS service identifier', - identifier value=s
	a2	[IUT >> USR]	The IUT indicates the SMS status (i.e. there are no messages from service s) to the user
			4- Mimic the Incoming SMS List becoming empty for SMS service t
	s2	[TS_1 >> IUT]	<{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = NG PP2, - deletion, entry id = first entry id (for SMS service t)

		- deletion, entry id = second entry id (for SMS service t) an <<Events Notification>> IE with - event type/subytpe= 'SMS message'/'No new SMS message', - event multiplicity=0 unread message (00H); - event type/subytpe="List change indication'/Incoming SMS List - event multiplicity=0 message in total (00H); - and a <<Call information>> IE with: - identifier type/subytpe='Service identifier'/'SMS service identifier', - identifier value=t
	a2 [IUT >> USR]	The IUT indicates the SMS status (i.e. there are no messages) to the user
Pass criteria:	Verify all answers	
Comments:	At the end of step 2, the 3 messages present in the incoming SMS lists are ordered as follows (only service id and read status fields are given): (t, unread), (s, unread), (t, read). Event multiplicity values only take into account messages for the indicated SMS service. The method of SMS status indication to the user is decided by the implementation.	

TC_PT_NG1.N.24_BV_602	Incoming SMS List - Indication to User of Receipt of Short Message while in a voice call
Test purpose:	Test correct operation of the PP when a short message is received 1- Mimic a short message arrival from SMS service id s 2- Mimic the Incoming SMS List becoming empty
Reference:	TS 102 527-5 [15], clause 7.4.1.6
Initial condition:	IUT (NG PP1) and NG PP2 are registered to TS_1 (NG FP) IUT and NG PP2 are both attached to lines 0 and 1. There is one read short message in the Incoming SMS List for SMS service id s. There is a single SMS service with service id 's' on the system, using line 0. External call in T-10 (IUT+TS_1) initiated by IUT on line 0 (call id a)
Time sequence:	1- Mimic a short message arrival s1 [TS_1 >> IUT] <{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id = first entry id, position indicator=0 - an <<Events Notification>> IE with: - event type/subytpe='SMS message'/'New SMS message arrived', - event multiplicity = 1 unread message (01H); - event type/subytpe='List change indication'/Incoming SMS List - event multiplicity = 2 messages in total (02H); - and a <<Call information>> IE with: - identifier type/subtype = 'Service identifier'/'SMS service identifier', - identifier value = s a1 [IUT >> USR] IUT indicates the SMS status (i.e. there is a message) to the user 2- Mimic the Incoming SMS List becoming empty s2 [TS_1 >> IUT] <{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = NG PP2, - deletion, entry id = first entry id - deletion, entry id = 2nd entry id - IE <<**Events Notification**>> with: - event type/subytpe='SMS message'/'New SMS message arrived', - event multiplicity=0 unread message (00H); - event type/subytpe='List change indication'/Incoming SMS List - event multiplicity=0 message in total (00H); - and IE <<**Call information**>> with: - identifier type/subytpe='Service identifier'/'SMS service identifier', - identifier value=s a2 [IUT >> USR] IUT indicates the SMS status (i.e. there is no message) to the user s3 [TS_1 >> IUT] {**CC-RELEASE**} message a3 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	Event multiplicity values only take into account messages for the indicated SMS service. The method of SMS status indication to the user is decided by the implementation.

6.44 TC_PT_NG1.N.25 Digital Telephone Answering Machine (DTAM) Test Cases

- "<<BASIC SERVICE **Local DTAM consulting call** >> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE with <Call class> = Internal call setup, <Basic service> = DTAM wideband speech default setup attributes"

- "<<BASIC SERVICE **Remote DTAM consulting call** >> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE with <Call class> = Normal call setup, <Basic service> = DTAM wideband speech default setup attributes"

TC_PT_NG1.N.25_BV_101	List of Supported Lists - DTAM support - Implementation of DTAM related lists
Test purpose:	Test that the PP checks for DTAM support before trying to use it
Reference:	TS 102 527-5 [15], clause 7.4.36.
Initial condition:	IUT is registered to TS_1 (NG FP)
Time sequence:	s1 [USR >> IUT] Open the 'List of Supported Lists'. a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA**>> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id = 00H denoting 'List of Supported Lists'> s3 [TS_1 >> IUT] <**Start session confirm**, List id=00H, session id=1, total number=1, discriminator type = 0> a3 [IUT >> TS_1] <**Read entries**, session id = 1, start index = 0, direction = 0, counter = 1, mark entries request = 00H, list entry field id = 01H> s4 [TS_1 >> IUT] <**Read entries confirm**, session id=1, start index=1, counter=1>, followed by <**data packet/data packet last**> with: - List identifiers' field including the following lists: -10H DTAM settings list - (*optional*) 11H DTAM Incoming call list -12H DTAM welcome message list s5 [USR >> IUT] Close the 'List of Supported Lists'. a5 [IUT >> TS_1] <**End session**, session id=1> s6 [TS_1 >> IUT] <**End session confirm**, session id=1> a6 [IUT >> TS_1] {**CC-RELEASE**} message s7 [TS_1 >> IUT] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	The DTAM Incoming Messages List is only mandatory for a Visual DTAM.

TC_PT_NG1.N.25_BV_103	DTAM Settings List - Edit entry - Edit DTAM timeout	
Test purpose:	Test that the PP can modify the DTAM timeout for a DTAM (DTAM2) Test that the PP supports a DTAM using different timeouts for different lines (managed by the same DTAM) Reduces timeout value to 5 seconds for the (DTAM2, line 1) association.	
Reference:	TS 102 527-5 [15], clause 7.4.36.5.1.4	
Initial condition:	IUT is registered to TS_1 (NG FP) TS_1 is preconfigured with the DTAM Settings List specified in clause 4.1.1.3.1. 'e2' is the entry id for (DTAM2, line 1) association in the DTAM Settings List. 'e3' is the entry id for (DTAM2, line 2) association in the DTAM Settings List. IUT is in state T-00	
Time sequence:	s1 [USR >> IUT]	Open the 'DTAM Settings' menu in order to modify the timeout for line 1 (managed by DTAM2).
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	s2 [TS_1 >> IUT]	{**CC-CALL-PROC**} message
	a2 [IUT >> TS_1]	<**Start session**, List id=10H ('DTAM Settings List') >
	s3 [TS_1 >> IUT]	<**Start session confirm**, List id=10H, session id=1, total number=3, discriminator type=0>
	a3 [IUT >> TS_1]	(*optional*) <**Query supported entry fields**>
	s4 [TS_1 >> IUT]	(*if requested*) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 01H 03H 04H 05H 06H 07H 08H 09H - non-editable fields: 02H
	a4 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, all list entry field ids> with s,d,c chosen so that at least entry with id 'e2' (see initial conditions above) is read.
	s5 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=s, counter=c>, followed by <**data packet/data packet last**> with the content of the requested fields
	a5.1 [IUT >> USR]	IUT displays all fields of each read entry in the DTAM Settings List
	a5.2 [IUT >> TS_1]	<**Edit entry**, session id=1, entry id=e2>, with list entry field id 1..n = (at least): - 05H (DTAM activation and timeout) - 06H (DTAM web link)
	s6.1 [TS_1 >> IUT]	<**Edit entry confirm**, session id=1> followed by <**data packet/data packet last**> with the fields requested in a2
	s6.2 [USR >> IUT]	Confirm modification of entry e2
	a6 [IUT>> TS_1]	<**Save entry**, session id=1, entry id =e2 > followed by <**data packet/data packet last**> with: - the DTAM timeout subfield of 05H set to 5 seconds (and other subfields unchanged, that is, left as found in s6.1) - the DTAM web link field set to 'line1-dtam2.example.com'
	s7.1 [TS_1]	Unset the 'default timeout' bit (if set)
	s7.2 [TS_1 >> IUT]	<**Save entry confirm**, session id=1, entry id=u, position index=2, total nb of available entries=3>
	a7 [IUT >> TS_1]	<**Read entries**, session id=1, start index=s, direction=d, counter=c, all list entry field ids> with s,d,c chosen so that at least entries with ids 'e2' and 'e3' (see initial conditions above) are read.
	s8 [TS_1 >> IUT]	<**Read entries confirm**, session id=1, start index=s, counter=c>, followed by <**data packet/data packet last**> with the requested fields.
	a8 [IUT >> USR]	Modification of (DTAM2, line 1) association settings as in a6 are displayed

		(DTAM2, line 2) association unchanged settings (i.e. left as in clause 4.1.1.3.1) are displayed
	s9 [USR >> IUT]	Close the 'DTAM Settings List'
	a9 [IUT >> TS_1]	<**End session**, session id=1>
	s10 [TS_1 >> IUT]	<**End session confirm**, session id=1>
	a10 [IUT >> TS_1]	{**CC-RELEASE**} message
	s11 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers At a8, verify that IUT is able to display line specific information for DTAM2 (DTAM2 simulated by TS_1 supports line specific information for all fields (and subfields thereof) as specified in clause 4.1.1.3.1.	
Comments:	At s1, the DTAM Settings menu corresponds to the user view of either a local log (if the PP caches the DTAM Settings List) or the remote list itself (if the PP gives direct access the FP side list). At a1, IUT has to access the remote list (whether it caches it or not) because the user attempts to change the list (and a change has to be fulfilled remotely first). At s4, tester indicates fields 03H, 05H, 06H, 07H, 08H as editable (editability of these fields is in general manufacturer defined).	

TC_PT_NG1.N.25_BV_104	DTAM Settings list - Validate current PIN code - Save New PIN code
Test purpose:	Test that the PP can validate current PIN code and save a new PIN code for local DTAM
Reference:	TS 102 527-5 [15], clause 7.4.36.5.2
Initial condition:	IUT is registered to TS_1 (NG FP) and attached to line 0. TS_1 is preconfigured with the DTAM Settings List specified in clause 4.1.1.3.1. (e1, e2, e3) = entry ids of three entries in clause 4.1.1.3.1 (in order)
Time sequence:	s1 [USR >> IUT] Open the 'DTAM Settings List'. a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA**>> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id=10H ('DTAM Settings List')> s3 [TS_1 >> IUT] <**Start session confirm**, List id=10H, session id=1, total number=2, discriminator type=0> a3 [IUT >> TS_1] (*optional*) <**Query supported entry fields**> s4 [TS_1 >> IUT] (*if requested*) < **Query supported entry fields confirm**, session id=1> with: - editable fields: 01H 03H 04H 05H 06H 07H 08H 09H - non-editable fields: 02H a4 [IUT >> TS_1] <**Edit entry**, session id=1, entry id=e1, field=04H ('Local DTAM current PIN code')> s5.1 [TS_1 >> IUT] <**Edit entry confirm**, session id=1>, followed by <**data packet/data packet last**> with Current PIN code field set to (FFH, FFH, FFH, FFH) s5.2 [USR >> IUT] User enters the current PIN code '0123' a5 [IUT >> TS_1] <**Save entry**, session id=1, entry id=e1>, followed by <**data packet/data packet last**, session id=1, content set to the value in s5.2> s6 [TS_1 >> IUT] <**Save entry confirm**, session id=1, entry id=e1, Position index=1, Total number of available entries=3> a6 [IUT >> TS_1] <**Edit entry,** session id=1, entry id=e1, field=09H ('Local DTAM new PIN code')> s6.1 [TS_1 >> IUT] <**Edit entry confirm**, session id=1 >, followed by <**data packet/data packet last**> with new PIN code field set to (FFH, FFH, FFH, FFH) s6.2 [USR >> IUT] User enters the new PIN code '5678' a6 [IUT >> TS_1] <**Save entry**, session id=1, entry id=e1>, followed by <**data packet/data packet last**, session id=2, content set to the value in s7.2> s8.1 [TS_1 >> IUT] <**Save entry confirm**, session id=1, entry id=e1, Position index=1, Total number of available entries=3> s8.2 [USR >> IUT] Close the 'DTAM Settings List' a8 [IUT >> TS_1] <**End session**, session id=1 '> s9 [TS_1 >> IUT] <**End session confirm**, session id=1> a9 [IUT >> TS_1] {**CC-RELEASE**} message s10 [TS_1 >> IUT] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	At s4, tester indicates fields 03H, 05H, 06H, 07H, 08H as editable (editability of these fields is in general manufacturer defined)

TC_PT_NG1.N.25_BV_105	DTAM Welcome Message list - Delete entry
Test purpose:	Test that the PP can delete a Welcome Message by using delete entry in the DTAM Welcome Messages List
Reference:	TS 102 527-5 [15], clause G.3
Initial condition:	IUT is registered to TS_1 (NG FP) and attached to line 1 and line 2 TS_1 is preconfigured with the DTAM Welcome Message list specified clause 4.1.1.3.3.
Time sequence:	s1 [USR >> IUT] Open the 'DTAM Welcome Messages' menu in order to delete the first welcome message of DTAM 2 a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id = 12H ('DTAM Welcome Message list'> s3 [TS_1 >> IUT] <**Start session confirm**, List id = 12H, session id = 1, total number =4, discriminator type = 0> a3 [IUT >> TS_1] (*optional*) <**Query supported entry fields**> s4 [TS_1 >> IUT] (*if requested*) < **Query supported entry fields confirm**, session id=1> with: - editable fields: None - non-editable fields: 01H, 02H 03H 04H a4 [IUT >> TS_1] <**Delete entry**, session id=1, entry id=id of 3rd entry > s5.1 [TS_1 >> IUT] <**Delete entry confirm**, List id=12H, session id=1, total number=4> s5.2 [USR >> IUT] Close the 'DTAM Welcome Message list'. a5 [IUT >> TS_1] <**End session**, List id = 12H (' DTAM Welcome Message list')> s6.1 [TS_1 >> IUT] <**End session confirm**, List id=12H, session id=1, total number=4, discriminator type = 0> s6.2 [USR >> IUT] Hang up on IUT s6.3 [TS_1 >> IUT] {**CC-RELEASE** } message a6 [IUT >> TS_1] {**CC-RELEASE-COM** } message
Pass criteria:	Verify all answers
Comments:	At s1, the 'DTAM Welcome Messages' menu corresponds to the user view of either a local log (if the PP caches the list) or the remote list (if the PP gives direct access the FP side list). At a1, IUT has to access the remote list (whether it caches it or not) because the user attempts to change the list (and a change has to be fulfilled remotely first). At a4, the delete entry is necessarily preceded with a 'Read entries' command (not tested), so that IUT is able to retrieve the entry id for the 3rd entry.

TC_PT_NG1.N.25_BV_200 (D)	DTAM consulting call to DTAM D - Play around with 2nd message and delete it - Parameterized test
Test purpose:	DTAM D may be local (DTAM1) or remote (DTAM2) If DTAM D is a Visual DTAM (DTAM1), the DTAM Incoming Messages List (=LI) is used, otherwise not. Tester uses Early {CC-CONNECT} implementation 1-DTAM consulting call with D 2-Testing DTAM commands scenario 3-DTAM consulting call release 4- Notifications for the modified list (LI) and other lists (call lists)
Reference:	TS 102 527-5 [15], clause 7.4.36.4
Initial condition:	Content of lists as defined in clause 4.1.1.3 (List content for DTAM tests) D = called DTAM (DTAM1 or DTAM2) tD = type of D ('Visual' for DTAM1, 'Voice-oriented' for DTAM2) If tD='Visual', then LI = 'DTAM Incoming Call List' is used. Otherwise it is not used. cD = call class required to call D ('Internal call setup' for DTAM1 (local), 'Normal call setup' for DTAM2 (remote)

nD = 'DTAM Number' for D (∅ for DTAM1, '456' for DTAM2)
LID = the set of lines handled by D ({line 0} for DTAM1, {line 1, line 2} for DTAM2)

i=2=index of entry used for the test
e1=entry id of ith entry

id(*list*) = list identifier of *list*.
#(*list*) = total number of entries in *list*.
call_status(*call_id, call_status*) = {**CC-INFO**} message with IE <<CALL INFORMATION>> with call id = *call_id*, call status= *call_status*.

IUT is NG PP1, TS_1 is NG FP
T-00

Time sequence:

s1.1	[USR >> IUT]	Open the DTAM menu for DTAM D
		1-Create DTAM consulting call with D with either method 1 or 2
s1.2	[USR >> IUT]	**Method 1 - Connect to DTAM D with direct consulting call**
a1	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<**BASIC-SERVICE**>> with <Basic service>= 'DTAM wideband speech default setup attributes', <Call class> = cD
s2.1	[TS_1 >> IUT]	{**CC-CONNECT**} message (*including call id assignment)* - IE <<CALL INFORMATION>> with call id a
s2.2	[TS_1 >> IUT]	call_status(call id a, **CS call setup ack**)
a2	[IUT >> TS_1]	{**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='∅' or 'nD' - IE <<CALL INFORMATION>> with call id a, line id1 ∈ LID'
s3.1	[TS_1 >> IUT]	(*optional*) call_status(call id a, '**CS call proc'**)
		--- OR ---
s4	[USR >> IUT]	**Method 2 - LiA session with a list + keypad 1C20H**
a4	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<**BASIC-SERVICE LiA**>>
s5	[TS_1 >> IUT]	{**CC-CALL-PROC**} message
a5.1	[IUT >> TS_1]	LiA session with e.g. Line settings list for retrieving line id
a5.2	[IUT >> TS_1]	{**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='1C20'H + Line id> (*optional*) LiA session ending
s6.1	[TS_1 >> IUT]	(*implicit basic service and call class change)* {**CC-CONNECT**} - IE <<CODEC-LIST>>
s6.2	[TS_1 >> IUT]	(*including call id assignment*) call_status(call id a, '**CS call proc'**)
		s7.1 follows either s3.1 or s6.2
s7.1	[TS_1 >> IUT]	(*optional*) call_status(call id a, '**CS call alerting**')
s7.2	[TS_1 >> IUT]	call_status(call id a, '**CS call connect**')
a7	[IUT >> TS_1]	<**Start DTAM session**, line id2 ∈ LID>
s8	[TS_1 >> IUT]	<**Start DTAM session confirm**, line id2, DTAM session id=dsi, discriminator type=0 or 1 >
		(*if tD = 'Visual' and PP does not cache list* LI) LiA session with DTAM Incoming Messages List (alias LI)
a8	[IUT >> TS_1]	<**Start session**, List id=id(LI), nb of sorting fields =0>
s9	[TS_1 >> IUT]	<**Start session confirm**, session id=si, total nb=#(LI)>
a9	[IUT >> TS_1]	IUT should read the whole list in order to present it to the user
a10	[IUT >> TS_1]	(*optional*)<**End session** session id=si>
s11	[TS_1 >> IUT]	(*if End session*)<**End session confirm** session id=si>
		if tD = 'Visual', *Play the i^{th} message in list LI*
a11	[IUT >> TS_1]	<**Play message**, type=incoming, **play mode=0**, index=i>
s12	[TS_1 >> IUT]	<**Play message confirm**>
		else (if tD='Voice-oriented'), *Play the second message*
a12	[IUT >> TS_1]	<**Select neighbour message**>
s13	[TS_1 >> IUT]	<**Select neighbour message confirm**>
		(After 5 seconds) *Restart playing of message*
a13	[IUT >> TS_1]	<**Play message**, type=incoming, **play mode=1**>
s14	[TS_1 >> IUT]	<**Play message confirm**>

		Pause playing of message
	a14 [IUT >> TS_1]	<**Pause/resume playing message**>
	s15 [TS_1 >> IUT]	<**Pause/resume message confirm**>
		Resume playing of message
	a15 [IUT >> TS_1]	<**Pause/resume playing message**>
	s16 [TS_1 >> IUT]	<**Pause/resume message confirm**>
		Stop playing of message
	a17 [IUT >> TS_1]	<**Stop playing message**>
	s18 [TS_1 >> IUT]	<**Stop playing message confirm**>
		Delete message the i^{th} message in list LI
	a18 [IUT >> TS_1]	<**Delete message**, type=incoming, index=i>
	s19.1[TS_1 >> IUT]	<**Delete message confirm**>
		4- (*if tD = 'Visual'*) Notifications for the modified DTAM Incoming Messages List
	s19.2[TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**List change details**>> with originating PP = 0, - deletion, entry id=e1 - IE <<**Events notification**>> with: - event type/subtype of 'Message Waiting/Voice' - event multiplicity= 2 unread messages for line 0 - event type/subt of 'List change ind./DTAM Incoming Messages List' - event multiplicity= 2 messages in total for line 0 - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = line 0
	s19.3[USR >> IUT]	(*if not open*) Open 'DTAM Incoming Message log' [for DTAM D]
	a19 [IUT >> USR]	Modifications to the list are visible.
		5-DTAM consulting call release
	s20 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a20 [IUT >> TS_1]	{**CC-RELEASE**} message
Pass criteria:		
Comments:	- At step 1, two methods are available to IUT for creating a DTAM consulting call. The stage at which call id assignment occurs differs from one method to the other. At s19.2, originating PP=0 because the PP is not directly responsible for the change through an LiA session. This also implies that the FP has to notify the change within <CC.NG.04> from event time (not after release of the call). At a19, if the PP caches the list, no LiA session is needed because only a deletion is notified.	

TC_PT_NG1.N.25_BV_201	DTAM consulting call to DTAM1 (Visual, local) - Play around with 3rd message and delete it
Test purpose and body:	See test TC_PT_NG1.N.25_BV_200 (D=DTAM1)

TC_PT_NG1.N.25_BV_202	DTAM consulting call to DTAM2 (Voice-Oriented, remote) - Play around with 3rd message and delete it
Test purpose and body:	See test TC_PT_NG1.N.25_BV_200 (D=DTAM2)

TC_PT_NG1.N.25_BV_300 (D, WDS)	DTAM consulting call for recording a new Welcome Message for DTAM D, waiting or not for a DTAM status (WDS boolean) - Parameterized test

Test purpose:	Local or Remote and Visual or Voice oriented DTAM testing, depending on the characteristics of DTAM D. 1-DTAM consulting call with D 2-Record a welcome message at index 2 (for DTAM D) (=testing commands *Record welcome message*, *Stop recording welcome message*) 3- Notifications for the modified Welcome Message List 4-LiA session for taking notification into account 5-DTAM consulting call release Tester uses Early {CC-CONNECT} implementation		
Reference:	TS 102 527-5 [15], clauses 7.4.36.4.8 and 9		
Initial condition:	Content of lists as defined in clause 4.1.1.3 (List content for DTAM tests) D = called DTAM (DTAM1 or DTAM2) tD = type of D ('Visual'for DTAM1, 'Voice-oriented' for DTAM2) cD = call class required to call D ('Internal call setup' for DTAM1 (local), 'Normal call setup' for DTAM2 (remote) nD = 'DTAM Number' for D (∅ for DTAM1, '456' for DTAM2) LID = the set of lines handled by D ({line 0} for DTAM1, {line 1, line 2} for DTAM2) LI = 'Welcome Message List' id(*list*) = list identifier of *list*. #(*list*) = total number of entries in *list*. call_status(*call_id, call_status*) = {**CC-INFO**} message with IE <<CALL INFORMATION>> with call id = *call_id*, call status= *call_status*. IUT is NG PP1, TS_1 is NG FP T-00		
Time sequence:			
			1-DTAM consulting call with D
	s1	[USR >> IUT]	Connect to the DTAM associated with line L
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<**BASIC-SERVICE**>> with <Basic service>= 'DTAM wideband speech default setup attributes', <Call class> = cD
	s2.1	[TS_1 >> IUT]	{**CC-CONNECT**} message - IE <<CALL INFORMATION>> with call id a
	s2.2	[TS_1 >> IUT]	call_status(call id a, **CS call setup ack**)
	a2	[IUT >> TS_1]	{**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='∅' or 'nD' - IE <<CALL INFORMATION>> with call id a, line id1 ∈ LID'
	s3.1	[TS_1 >> IUT]	(*optional*) call_status(call id a, '**CS call proc'**)
	s3.2	[TS_1 >> IUT]	(*optional*) call_status(call id a, '**CS call alerting**')
	s3.3	[TS_1 >> IUT]	call_status(call id a, '**CS call connect**')
	a3	[IUT >> TS_1]	<**Start DTAM session**, line id2 ∈ LID>
	s4.1	[TS_1 >> IUT]	<**Start DTAM session confirm**, line id2, DTAM session id=dsi, discriminator type=0 or 1 >
			2-Record a welcome message at index 2 (for DTAM D)
	s4.2	[USR >> IUT]	*User initiates recording of welcome message at position 2*
	a4	[IUT >> TS_1]	<**Record welcome message**, index=2>
	s5.1	[TS_1 >> IUT]	Timer MAX_DURATION started, with timeout 1 min
	s5	[TS_1 >> IUT]	<**Record welcome message confirm**>
	s6.1	[USR >> IUT]	User speaks in order to record a welcome message *Then depending on* WAIT_DTAM_STATUS *value, either s6.2..s7.1, or s6.3..s7.2* is used.
	s6.2	[USR >> IUT]	(*if* WAIT_DTAM_STATUS=NO) *User stops recording on IUT using MMI before timeout of* MAX_DURATION
	a6	[IUT >> TS_1]	<**Stop recording welcome message**>
	s7.1	[TS_1 >> IUT]	<**Stop recording welcome message confirm**>
			--- OR ---
	s6.3	[TS_1]	(*if* WAIT_DTAM_STATUS=YES) Wait for MAX_DURATION expiry

	s7.2 [TS_1 >> IUT]	(after MAX_DURATION expiry) <**DTAM status** value= '*Message maximum recording time was reached*' >
		3- Notifications for the modified Welcome Message List
	s7.3 [TS_1 >> IUT]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - modification, entry id=id of (D, index 2), position indicator= id of (D, index 1) (time duration has changed) - IE <<**Events Notification**>> with: - event type/subtype of 'List change ind./Welcome Message List - event multiplicity= 4 messages in total
	s7.4 [TS_1]	*User invited to open Welcome Message log and to press "Y" when done*
	a7 [USR >> IUT]	Open the 'Welcome Message log' [for DTAM D]
	s8.1 [USR >> TS_1]	(*immediately*) **Press "Y"**
	s8.2 [TS_1]	Timer T2 started, with timeout = <CC.NG.04>
		4-LiA session for taking notification into account
	a8 [IUT >> TS_1]	(*if not done before*) <**Start session**, List id=id(LI), nb of sorting fields =0>
	s9 [TS_1 >> IUT]	<**Start session confirm**, session id=si, total nb=#(LI)>
	a9 [IUT >> TS_1]	(*before T2 expiry*) <**Read selected entries**, session id=si, mark entries request= don't care value, list entry field id 1..n = some or all ids among 01H 02H 03H 04H, Selection = (type="selection from entry identifiers", description= (nb=1,entry id=(D, index 2) entry id')>
	s10 [TS_1 >> IUT]	<**Read selected entries confirm** session id=si, partial delivery=0, counter=1>, followed by <**data *packet*/data packet last**> with the requested entry
	a10 [TS_1 >> IUT]	<**End session** session id=si>
	s11 [IUT >> TS_1]	<**End session confirm** session id=si>
	a11 [IUT >> USR]	Modification to entry (D, index 2) (time duration update) is visible.
		5-DTAM consulting call release
	s12 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	a12 [IUT >> TS_1]	{**CC-RELEASE**} message
Pass criteria:		
Comments:	At step 2, when D=DTAM1, welcome message position index 2 is the one currently used by line 0; When D=DTAM2, index 2 is a welcome message position that could be used by line 1 or line 2, but is currently not used (e.g. if user manually selects one message or the other depending on a time constraint). At s7.3, originating PP=0 because the PP is not directly responsible for the change through an LiA session. This also implies that the FP has to notify the change within <CC.NG.04> from event time (not after release of the call). At s7.3, no IE<<**Call information**>> is used in the {FACILITY} message because the Welcome Message List has no Line id field. At a8, the LiA session could have been started (and even terminated) before s7.4. At a9, Use of '**Read selected entries**' is the most efficient reaction to s7.3 containing list change details. However use of 'Read entries' is also allowed, but in that case P200 entries shall be read within T2 timeout.	

TC_PT_NG1.N.25_BV_301	DTAM consulting call for recording a new Welcome Message for DTAM1 (Visual), waiting for a DTAM status
Test purpose and body:	See test TC_PT_NG1.N.25_BV_300(D=DTAM1, WDS=YES)

TC_PT_NG1.N.25_BV_302	DTAM consulting call for recording a new Welcome Message for DTAM1 (Visual), NOT waiting for a DTAM status
Test purpose and body:	See test TC_PT_NG1.N.25_BV_300(D=DTAM1, WDS=NO)

TC_PT_NG1.N.25_BV_303	DTAM consulting call for recording a new Welcome Message for DTAM2 (Voice-oriented), waiting for a DTAM status
Test purpose and body:	See test TC_PT_NG1.N.25_BV_300(D=DTAM2, WDS=YES)

TC_PT_NG1.N.25_BV_304	DTAM consulting call for recording a new Welcome Message for DTAM2 (Voice-oriented), NOT waiting for a DTAM status
Test purpose and body:	See test TC_PT_NG1.N.25_BV_300(D=DTAM2, WDS=NO)

TC_PT_NG1.N.25_BV_400	DTAM Incoming Messages List - Delete message through delete entry
Test purpose:	Test that the PP can delete a message by using delete entry on the DTAM Incoming Messages List.
Reference:	TS 102 527-5 [15], clauses 7.4.36.2.2 and G.3
Initial condition:	IUT is registered to TS_1 (NG FP) TS_1 is preconfigured with the DTAM Incoming Messages List specified in clause 4.1.1.3.2.
Time sequence:	s1 [USR >> IUT] Open the 'DTAM Incoming Calls Log' for DTAM1 and attempt to delete the 3rd entry. a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> s2 [TS_1 >> IUT] {**CC-CALL-PROC**} message a2 [IUT >> TS_1] <**Start session**, List id=11H ('DTAM Incoming Call List') > s3 [TS_1 >> IUT] <**Start session confirm**, List id=11H, session id=1, total number=3, discriminator type=0> a3 [IUT >> TS_1] <**Delete entry**, session id=1, entry id=id of 3rd entry > s4.1 [TS_1 >> IUT] <**Delete entry confirm**, List id=11H, session id=1, total number=3> s4.2 [USR >> IUT] Close the 'DTAM Incoming Messages List' a4 [IUT >> TS_1] <**End session**, session id=1> s5 [TS_1 >> IUT] <**End session confirm**, session id=1> a5 [IUT >> TS_1] {**CC-RELEASE**} message s6 [TS_1 >> IUT] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers
Comments:	At s1, the DTAM Incoming Calls Log corresponds to the user view of either a local log (if the PP caches the list) or the remote list (if the PP gives direct access the FP side list). At a1, IUT has to access the remote list (whether it caches it or not) because the user attempts to change the list (and a change shall be fulfilled remotely first). At a3, the delete entry should be preceded with a 'Read entries' command (not tested), especially if IUT does not cache the list, so that IUT is able to retrieve the entry id for the 3rd entry.

6.45 TC_PT_NG1.N.26 DTAM Screening Test Cases

TC_PT_NG1.N.26_BV_101	Call Screening Support on PP
Test purpose:	Test for call screening capability on PP during location registration
Reference:	TS 102 527-1 [13], clause 7.4.9.1 TS 102 527-5 [15], clause 7.4.9.1 EN 300 175-5 [5], clause 7.7.41
Initial condition:	IUT (PP1) is registered to TS_1 (NG FP) T-00

Time sequence:	s1 [USR >> IUT] Switch IUT off and on again a1 [IUT >> TS_1] {LOCATE-REQUEST} message with an IE <<Terminal-capability>> with following capabilities declared: - "Support of NG DECT Part 3" capability in Profile indicator_7 (octet 4f) - "Support of NG DECT Part 5" capability in Profile indicator_7 (octet 4f) - "Support of Screening feature" in Profile indicator_10 (octet 4i)
Pass criteria:	Verify all answers
Comments:	

TC_PT_NG1.N.26_BV_201	Call Screening Acceptance and Interception	
Test purpose:	Test that PP receives call screening indication, accept the screening call and then intercept the call. 1- Incoming call on line 0 from Phone A 2- Call screening indication sent from FP (TS_1) 3- Call automatically accepted and connected for screening 4- Call manually intercepted and (regularly) connected	
Reference:	TS 102 527-5 [15], clauses 7.4.36.6.2, 7.4.36.6.3 and 7.4.36.6.5	
Initial condition:	IUT (NG PP1) is registered to TS_1 (NG FP) and attached to line 0. TS_1 is preconfigured with the DTAM Settings List specified in clause 4.1.1.3.1	
Time sequence:		1-Incoming call from Phone A presented until DTAM timeout
	s1.1 [PhA >> TS_1]	Incoming call on line 0 from Phone A
	s1.2 [TS_1 >> IUT]	{**CC-SETUP**} message with <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup)=<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	a1.1 [IUT >> TS_1]	{**CC-ALERTING**}
	a1.2 [IUT]	Wait until DTAM1 timeout for line 0 expires (do not pick up call).
	s2.1 [TS_1]	DTAM1 answers the call.
		2- Call screening indication sent from FP (TS_1)
	s2.2 [TS_1 >> IUT]	**{CC-INFO}** with <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,FH)>
	s2.3 [PhA >> TS_1]	Recording of message started
		3- Call automatically accepted and connected for screening
	a2.1 [IUT >> TS_1]	**{CC-INFO}** with <<MULTI-KEYPAD>> set to '1C 48'H (call screening accept) <<CALL-INFORMATION>> with call id a
	a2.2 [IUT >> TS_1]	**{CC-CONNECT}**
	s3.1 [TS_1 >> IUT]	**{CC-CONNECT-ACK}** with call id a
	s3.2 [TS_1 >> IUT]	**{CC-INFO}** with <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS screening connect) =<(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,10H)>
	a3 [IUT >> USR]	Microphone muted and audio routed to speaker (or earpiece)
		4- Call manually intercepted and (regularly) connected
	s4 [USR >> IUT]	MMI item for intercepting call used after a few seconds but before screening timeout
	a4 [IUT >> TS_1]	**{CC-INFO}** with <<MULTI-KEYPAD>> set to '1C 49'H (call screening intercept) <<CALL-INFORMATION>> with call id a
	s5 [TS_1 >> IUT]	**{CC-INFO}** with <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS call connect) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,5)>

	a5.1 [IUT >> USR]	Microphone unmuted and audio re-routed to the regular output
	a5.2 [IUT >> TS_1]	**{CC-RELEASE}** message
	s6 [TS_1 >> IUT]	**{CC-RELEASE-COM}** message
Pass criteria:	Verify all answers. At a3, verify that IUT can listen to the screened call and that Phone A cannot hear IUT. At a5.1, verify that audio can be heard in both directions.	
Comments:		

TC_PT_NG1.N.26_BV_202	Call Screening Rejection	
Test purpose:	Test that PP can reject the screening call 1-Incoming call from Phone A presented until DTAM timeout 2- Call screening indication sent from FP (TS_1) 4- Call screening manually rejected	
Reference:	TS 102 527-5 [15], clauses 7.4.36.6.2 and 7.4.36.6.4	
Initial condition:	IUT is registered to TS_1 (NG FP) and attached to line 0. TS_1 is preconfigured with the DTAM Settings List specified in clause 4.1.1.3.1	
Time sequence:		1-Incoming call from Phone A presented until DTAM timeout
	s1.1 [PhA >> TS_1]	Incoming call on line 0 from Phone A
	s1.2 [TS_1 >> IUT]	{**CC-SETUP**} message with: - IE <BASIC-SERVICE >> with < Call class = 'Normal call setup' > - IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup)=<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	a1.1 [IUT >> TS_1]	{**CC-ALERTING**}
	a1.2 [IUT]	Wait until DTAM1 timeout for line 0 expires (do not pick up call).
	s2.1 [TS_1]	DTAM1 answers the call.
		2- Call screening indication sent from FP (TS_1)
	s2.2 [TS_1 >> IUT]	**{CC-INFO}** with <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,FH)>
	s2.3 [PhA >> TS_1]	Recording of message started
		4- Call screening manually rejected
	s4 [USR >> IUT]	MMI item forejecting screened call used after a few seconds
	a2 [IUT >> TS_1]	**{CC-RELEASE-COM}** message
Pass criteria:	Verify all answers	
Comments:	In a2, the rejection of a first call presented for screening uses abnormal call release because the call is not yet connected.	

TC_PT_NG1.N.26_BV_301	Call screening Acceptance of waiting call	
Test purpose:	Test that PP can accept a waiting call being screened	
Reference:	TS 102 527-5 [15], clause 7.4.36.6.8	
Initial condition:	2 PPs registered to TS_1 (NG FP) and attached to line 0. IUT is PP1, TS_2 is NG PP2. TS_1 is preconfigured with the DTAM Settings List specified in clause 4.1.1.3.1 IUT is in active call with TS_2	
Time sequence:	s1.1 [IUT <> TS_2]	Internal call active with call id a
	s1.2 [PhA >> TS_1]	Incoming call on line 0 from Phone A
	s1.3 [TS_1 >> IUT]	*(In one or several messages)* {**CC-INFO**} message(s) with: - (Optional) IE <<SIGNAL>> with value 07H indicating 'Call waiting tone on' - IE <<CALLING PARTY NUMBER <CLIP_A number> >> - (Optional) IE <<CALLING_PARTY NAME <CNIP_A> >> - IE <<CALL-INFORMATION>> with (line 0, line type info, call id b, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value b),(2, 1, 1)>
	a1 [IUT]	Call waiting tone heard on IUT. Wait until DTAM1 timeout for line 0 expires (do not accept waiting call).
	s2.1 [TS_1]	DTAM1 answers the call.
	s2.2 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type information, call id b, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value b), (2,1,FH)>
	s2.3 [PhA >> TS_1]	Start recording message
	a2 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<MULTI-KEYPAD>> set to '1C 48'H (call screening accept) - IE <<CALL-INFORMATION>> with call id b
	s3.1 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id a, CS call hold)=<(1, 0, value a), (2, 1, 9)>
	s3.2 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id b, CS screening connect)=<(1, 0, value b), (2, 1, 10H)>
	s3.3 [TS_1 >> TS_2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id b, CS idle) = <(1, 0, value b), (2, 1,0)>
Pass criteria:	Verify all answers At s3.2, verify that IUT can listen to the screening call.	
Comments:		

6.46 TC_PT_NG1.A.4 Base manual transmit power control Test Cases

See TC_PT_NG1.N.16_BV_5201.

6.47 TC_PT_NG1.A.5 Handset adaptive transmit power control Test Cases

TC_PT_NG1.A.5_BV_101	Handset adaptive transmit power control - Power attenuation - RSSI increase	
Test purpose:	Verify RSSI power level increase on IUT as a result of handset transmit power adaptation: 1- Measure RSSI value on FT side, for an incoming call at 1 meter in good transmit conditions. 2- Measure RSSI value on FT side, for an incoming call at 1 meter, with an attenuation of tester transmit power level simulating either bad transmit conditions or a moved away FP.	
Reference:	TS 102 527-5 [15], clause 7.10.3.2	
Initial conditions:	The IUT is located near from the tester (maximum of 1 meter distance). The IUT is idle (i.e. in state F-00 at the NWK layer). FP power level on the FP value is 'Normal power level'. The IUT will stay at the same distance from the tester during the complete test.	
Time sequence:		1- Measure RSSI value for an incoming call at 1 meter in good transmit conditions
	s1.1 [TS1 >> IUT]	Incoming G.722 call started
	s1.2 [USR >> IUT]	Incoming call picked up
	s1.3 [TS1]	Incoming call established
	s1.4 [TS_1]	Wait 2 seconds (until IUT completed the adaptation of the transmit power level)
	s1.5 [TS1]	RSSI value on the traffic bearer measured and stored as RSSI_NEAR
	a1 [IUT]	None
		Release the call
	s2 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a2 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
		2- Measure RSSI value for an incoming call at 1 meter in simulated bad transmit conditions
	s3.1 [TS1 >> IUT]	Incoming G.722 call started
	s3.2 [USR >> IUT]	Incoming call picked up
	s3.3 [TS1]	Power attenuation of at least 30 dB applied on the transmit traffic bearer
	s3.4 [TS_1]	Wait 2 seconds (until IUT completed the adaptation of the transmit power level as a result of attenuation)
	s3.5 [TS1]	RSSI value measured and stored as RSSI_LOW_RADIO
	s3.5 [TS1 >> USR]	RSSI_NEAR and RSSI_LOW_RADIO displayed
	a3 [TS1]	Inequality RSSI_LOW_RADIO ≥ RSSI_NEAR + 6 dB holds as a result of RSSI value increase
		Release the call
	s4 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a4 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	- The power attenuation started in s4.3 may also be started between s4.1 and s4.2. - At s1.5, IUT has reached the transmit power level needed for an incoming call at 1 meter. - RSSI increase on FP side is assumed to reflect PP side transmit power increase (which is what the test is supposed to measure) because FP-PP distance is low.	

7 Fixed Part Test specification

This clause includes lists of the test groups relevant for a NG-DECT fixed part. Test cases are ordered so that network features are followed by application features (TS 102 527-5 [15], clauses 6.4 and 6.9).

The NG-DECT fixed part under test shall be connected to a network when running the tests suite.

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.1 TC_FT_NG1.N.1 Codec negotiation tests cases

In addition to clause 7.1 of TS 102 841 [16] the following test cases shall apply.

TC_FT_NG1.N.1_BV_105	NG DECT Part 5 higher layer capabilities
Test purpose:	-
Reference:	TS 102 527-5 [15], clause 7.4.9.1. EN 300 175-5 [5], clause F.3
Initial condition:	F-00
Time sequence:	s1 [TS_1 >> IUT] Perform an access rights request a1 [IUT >> TS_1] • "NG-DECT Extended wideband voice supported" higher layer capability bit is set to 1 (= Extended higher layer capabilities (part 2) a29 bit). • Support of 'Re-keying' and 'early encryption' in Extended higher layer capabilities part 2 is set (a42 bit=1). • Support of "NG-DECT Additional feature set nr.1 for extended wideband voice" in Extended higher layer capabilities part 2 is set (a36 bit=1).
Pass criteria:	Verify all answers

7.2 TC_FT_NG1.N.2 Codec switching tests cases

Clause 7.2 of TS 102 841 [16] shall apply.

7.3 TC_FT_NG1.N.3 Missed call notification tests cases

Clause 7.3 of TS 102 841 [16] shall apply.

7.4 TC_FT_NG1.N.4 Voice message waiting notification tests cases

Clause 7.4 of TS 102 841 [16] shall apply.

7.5 TC_FT_NG1.N.5 Date and time synchronization tests cases

In addition to clause 7.5 of TS 102 841 [16] the following test cases shall apply.

TC_FT_NG1.N.5_BV_103	PT Date and Time recovery, after location registration
Test purpose:	After PP location registration was just completed, test that the FP sends the current date/time for PP date and time recovery purpose.
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.20.3 and 7.4.2 F-00, TS_1 is registered on IUT.
Time sequence:	s1 [TS_1 >> IUT] Perform location registration a1 [IUT >> TS_1] {**FACILITY**} message for date and time synchronization with IE <<TIME-DATE = <Time and Date, The current time/date, (*IUT system time and date value*)> >> s2 [TS_1 >> IUT] Initiate an outgoing call and hang up; open the All Calls List a2 [IUT >> TS_1] Receive outgoing call date and time
Pass criteria:	- Verify all answers - Verify in a2 that the outgoing call date and time correspond to the date and time received by TS_1 in a1 (±1 min)
Comments:	- Test case does not depend on clock master setting (PP or FP)

TC_FT_NG1.N.5_BV_104	FT Date and Time recovery - FP off during 1 minute
Test purpose:	Make the FP OFF 1 min and then ON again, and make sure a valid date/time is set on FP side after 5 min. A PP (TS_1) with valid date/time is registered and performs location registration after the FP is switched ON again.
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.20.3 and 7.4.2 F-00, TS_1 is registered on IUT; TS_1 clock is set to the correct date and time and has the "Date and time recovery" capability bit set;
Time sequence:	s1.1 [USR >> IUT] Switch IUT off; wait 1 minute; Switch IUT on again; wait for 5 minutes s1.2 [TS_1 >> IUT] Initiate an outgoing call and hang up; open the All Calls List a1 [TS_1 >> USR] Receive outgoing call date and time
Pass criteria:	- Verify in a1 that the outgoing call date and time corresponds to the current date and time (±1 min)
Comments:	- Test case does not depend on clock master setting (PP or FP) - IUT may have recourse to TS_1 date and time for recovery, but is not forced to. - In s1.1, TS_1 shall perform location registration toward the IUT after the IUT has been switched on again

TC_FT_NG1.N.5_BV_105	FT Date and Time recovery - FP short reboot (no locate request)
Test purpose:	Make a FP "short reboot" and make sure a valid date/time is set on FP side after 5 min. A PP (TS_1) with valid date/time is registered and does NOT perform location registration after the FP is switched ON again.
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.20.3 and 7.4.2 F-00, TS_1 is registered on IUT, TS_1 clock is set to the correct date and time and has the "Date and time recovery" capability bit set;
Time sequence:	s1.1 [USR >> IUT] Switch FP off and immediately on again; wait for 5 minutes s1.2 [TS_1 >> IUT] Initiate an outgoing call and hang up; open the All Calls List a1. [TS_1 >> USR] Receive outgoing call date and time
Pass criteria:	- Verify in a1 that the outgoing call date and time corresponds to the current date and time (±1 min)
Comments:	- A PP is only forced to perform a location registration after one minute of being out of range (or FP being unavailable) - Test case does not depend on clock master setting (PP or FP) - IUT may have recourse to TS_1 date and time for recovery, but is not forced to - In s1.1, TS_1 shall NOT perform location registration toward the IUT after the IUT has been switched on again

7.6 TC_FT_NG1.N.6 Parallel calls tests cases

Clause 7.6 of TS 102 841 [16] shall apply.

7.7 TC_FT_NG1.N.7 Common parallel call procedures tests cases

Clause 7.7 of TS 102 841 [16] shall apply.

7.8 TC_FT_NG1.N.8 Call transfer tests cases

In addition to clause 7.8 of TS 102 841 [16] the following test cases shall apply.

TC_FT_NG1.N.8_BV_103	**G.726 Call transfer (external)** - announced	
Test purpose:	Test that FP correctly transfers a G.726 call.	
Reference:	TS 102 527-3 [14], clause 7.4.3.6.1	
Initial condition:	2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), **G.726** external call in F-10 (TS_1+IUT) initiated by TS_1 on line 0 (call id a) with Phone C	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<MULTI-KEYPAD>> set to (17H, IA5 coding of terminal identity number in decimal of TS_2) digits.
	a1.1 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call hold) =<(1, 0, value a), (2, 1, 9)>
	a1.2 [IUT >> TS_2]	{**CC-SETUP**} message with IE <<BASIC-SERVICE>> 'Internal call setup' and IE <<CALL-INFORMATION>> specifying (call id b, CS call setup) =<(1, 0, value b), (2, 1, 1)>
	a1.3 [IUT >> TS_1]	(**optional**) {CC-INFO} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call proc) =<(1, 0, value b), (2, 1, 3)>
	s2 [TS_2 >> IUT]	{**CC ALERTING**} message
	a2.1 [IUT >> TS_1]	{**CC-INFO**} message with IE <<SIGNAL>> with value 01H indicating 'ring back tone on'
	a2.2 [IUT >> TS_1]	(**optional**) (In the same or in a different {CC-INFO} message) IE <<CALL-INFORMATION>> specifying (call id b, CS call alerting) =<(1, 0, value b), (2, 1, 4)>
	s3 [TS_2 >> IUT]	{**CC-CONNECT**} message
	a3.1 [IUT >> TS_2]	{**CC-CONNECT-ACK**} message, followed by a {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call connect) =<(1, 0, value b), (2, 1, 5)>
	a3.2 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call connect) =<(1, 0, value b),(2, 1, 5)>
	a3.3 [IUT >> TS_1]	In the same message containing the call status indication or a different {**CC-INFO**} messages) IE <<SIGNAL>> with value 3FH indicating 'Tones Off'
	a3.4 [TS_1 <> TS_2]	**G.726** or **G.722** end-to-end U-plane connection
	s4 [TS_1 >> IUT]	(**call transfer request**) {CC-INFO} message with: - IE << MULTI-KEYPAD >> set to (1CH, 34H) digits and - IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a)>
	a4.1 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying either: - (a4.1.1) (call id a, CS idle) =<(1, 0, value a), (2, 1, 0)> **OR** - (a4.1.2) (call id b, CS idle) =<(1, 0, value b), (2, 1, 0)>;
	a4.2 [IUT >> TS_1]	(**optional**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying either: - (**if a4.1.1**) (call id b, CS idle) =<(1, 0, value b), (2, 1, 0)> **OR** - (**if a4.1.2**) (call id a, CS idle) =<(1, 0, value a), (2, 1, 0)>;
	a4.3 [IUT >> TS_1]	{**CC-RELEASE**} message *Optionally perform a4.4 to s6 if U-plane connection in a3.4 was established in G.722*

	a4.4 [IUT >> TS_2]	{**CC-SERVICE-CHANGE**} message with IE <<CODEC-LIST>> set to G.726
	s5 [TS_2 >> IUT]	{**CC-SERVICE-ACCEPT**} message
	a5 [IUT >> TS_2]	{**IWU-INFO**} with IE <<CODEC-LIST>> set to G.726
	s6 [TS_2 >> IUT]	{**IWU-INFO**} with IE <<CODEC-LIST>> set to G.726
	a6.1 [IUT >> TS_2]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id b, updated call id a, CS call connect) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value b), (1, 1, value a),(2, 1, 5)>
	s7 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message.
	a7 [TS_2 <> PhC]	**G.726** end-to-end U-plane connection
Pass criteria:	Verify all answers - In a5, verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_2. - a6.1 may be sent by IUT anywhere between s4 and a7.	
Comments:	As TS_1 first call is narrowband, IUT may establish parallel internal call in NB also - Only final codec change between IUT and TS_2 (if needed) is tested	

TC_FT_NG1.N.8_BV_201	**G.726 Call transfer (external)** - unannounced	
Test purpose:	Test that the FP correctly handles a G.726 call in the unannounced case	
Reference:	TS 102 527-3 [14], clauses 7.4.3.6 and 7.4.3.6.2	
Initial condition:	2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), **G.726** external call in F-10 (TS_1+IUT) initiated by TS_1 on line 0 (call id a) with Phone C	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<MULTI-KEYPAD>> set to (17H, IA5 coding of terminal identity number in decimal of TS_2) digits
	a1.1 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call hold) =<(1, 0, value a), (2, 1, 9)>
	a1.2 [IUT >> TS_2]	{**CC-SETUP**} message with - IE <<BASIC-SERVICE>> 'Internal call setup' and - IE <<CALL-INFORMATION>> specifying (call id b, CS call setup) =<(1, 0, value b), (2, 1, 1)>
	a1.3 [IUT >> TS_1]	(**optional**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id b, CS call proc) =<(1, 0, value b), (2, 1, 3)>
	s2 [TS_2 >> IUT]	{**CC-ALERTING**} message
	a2.1 [IUT >> TS_1]	{**CC-INFO**} message with an IE <<SIGNAL>> with value 01H indicating 'Ring back tone on'
	a2.2 [IUT >> TS_1]	(**optional**) (in the same or different {**CC-INFO**} message) IE <<CALL-INFORMATION>> specifying (call id b, CS call alerting) =<(1, 0, value b), (2, 1, 4)>
	s3. [TS_1 >> IUT]	(**call transfer request**) {**CC-INFO**} message with: - IE << MULTI-KEYPAD >> set to (1CH, 34H) digits and - IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a)>
	a3.1 [IUT >> TS_1]	(In the same message containing the call status indication or different {**CC-INFO**} message) IE <<SIGNAL>> with the value 3FH indicating 'Tones Off'
	a3.2 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying either: - (a3.2.1) (call id a, CS idle) =<(1, 0, value a), (2, 1, 0)> OR - (a3.2.2) (call id b, CS idle) =<(1, 0, value b), (2, 1, 0)>;
	a3.3 [IUT >> TS_1]	(**optional**) {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying either: - (**if a3.2.1**) (call id b, CS idle) =<(1, 0, value b), (2, 1, 0)> OR - (**if a3.2.2**) (call id a, CS idle) =<(1, 0, value a), (2, 1, 0)>;
	a3.4 [IUT >> TS_1]	{**CC-RELEASE**} message
	a3.5 [IUT >> TS2]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying: (line 0, line type information, call id b, updated call id a, CS call under transfer) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value b), (1, 1, value a), (2, 1, 12)>
	s4.1 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message

	s4.2 [TS_2 >> IUT]	(**call pick up**) {**CC-CONNECT**} message
	a4.1 [IUT >> TS2]	{**CC-CONNECT-ACK**} message
	a4.2 [IUT >> TS2]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
		Optionally perform a4.3 to s6 if negotiated codec was G.722
	a4.3 [IUT >> TS_2]	{**CC-SERVICE-CHANGE}** message with IE <<CODEC-LIST>> set to G.726
	s5 [TS_2 >> IUT]	{**CC-SERVICE-ACCEPT**} message
	a5 [IUT >> TS_2]	{**IWU-INFO**} with IE <<CODEC-LIST>> set to G.726
	s6 [TS_2 >> IUT]	{**IWU-INFO**} with IE <<CODEC-LIST>> set to G.726
	a6 [TS_2 <> Ph C]	End-to-end U-plane connection between TS_2 and Phone C
Pass criteria:	Verify all answers In a4.3 service change (if needed) occurs after end to end connection. It could however take place as soon as default codec between IUT and TS_2 is negotiated (possibly after s2) Other service change related messages (s5, a5, s6, a6) are then sent in parallel to call establishment messages (there are no sequence constraints between the two types of messages) - In a5, verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_2	
Comments:	- As TS_1 first call is narrowband, IUT may establish parallel internal call in NB also - Only final codec change between IUT and TS_2 (if needed) is tested	

TC_FT_NG1.N.8_BV_402	Remote party CLIP on **unannounced** call transfer - Transfer of external **outgoing** call	
Test purpose:	-	
Reference:	TS 102 527-3 [14], clauses 7.4.3.6.4 and 7.4.3.6.5, figure 18	
Initial condition:	2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), External call in F-10 (TS_1+IUT) initiated by TS_1 on line 0 (call id a) with Phone A	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<MULTI-KEYPAD>> set to (17H, HANDSET_TS_2_NUMBER) digits
	a1.1 [IUT >> TS_2]	{**CC-SETUP**} message **with** IE <<BASIC-SERVICE>> 'Internal call setup' **and (optionally)** IE << CALLING PARTY NUMBER = <Network specific number, Private plan, HANDSET_TS_1_NUMBER > >> **and** IE <<CALL-INFORMATION>> specifying (call id b, CS call setup) =<(1, 0, value b), (2, 1, 1)>
	a1.2 [IUT >> TS_2]	**(optional)** {**CC-INFO**} message with an IE << CALLING PARTY NUMBER = <Network specific number, Private plan, HANDSET_TS_1_NUMBER > >> and with IE <<CALL-INFORMATION>> specifying (call id b) =<(1, 0, value b)>
	s2.1 [TS_2 >> IUT>>	{**CC-ALERTING**} message
	s2.2 [TS_1 >> IUT]	**(call transfer request)** {CC-INFO} message with IE << MULTI-KEYPAD >> set to (1CH, 34H) digits and with IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a)>
	a2 [IUT >> TS_2]	(**remote party CLIP**) {**CC-INFO**} message with IE <<CALLING PARTY NUMBER = < Number type= Unknown >, < Numbering plan id = Unknown>, < Presentation indicator= Presentation allowed, < Screening indicator= User-provided, verified and passed >, < Calling party address= Phone A number > >> and with IE <<CALL-INFORMATION>> specifying either (call id b) = <(1,0, value b> or (call id a) =<(1, 0, value a)>

Pass criteria:	Verify all answers. - One of the two optional items (second IE in a1.1 **or** a1.2 as a whole) shall be present. Both items are mutually excusive. - In a2 answer, call id b shall be used if Phone A CLIP is sent together with 'CS call under transfer call status' (and call id update from b to a); call id a shall be used if Phone A CLIP is sent in a subsequent {CC-INFO} message. - Test equipment shall allow implementations, where after answer a2, IUT presents again the original call to TS_1 (through an incoming {CC-SETUP}). TS_1 may for example send an additional {CC-RELEASE}.
Comments:	

TC_FT_NG1.N.8_BV_502	Remote party CNIP on **unannounced** call transfer - Transfer of external **outgoing** call	
Test purpose:	-	
Reference:	TS 102 527-3 [14], clause 7.4.3.6.5, figure 18	
Initial condition:	2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), External call in F-10 (TS_1+IUT) initiated by TS_1 on line 0 (call id a) with Phone A An entry exists for Phone A telephone number in IUT Contact List with 'Name' and 'First name' not both empty	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-INFO**} message with IE <<MULTI-KEYPAD>> set to (17H, HANDSET_TS_2_NUMBER) digits
	a1.1. [IUT >> TS_2]	{**CC-SETUP**} message **with** IE <<BASIC-SERVICE>> 'Internal call setup' **and (optionally)** IE << CALLING PARTY NAME = < Presentation allowed, DECT standard or UTF-8, User-provided, verified and passed, HANDSET_TS_1_NAME > >> **and** IE <<CALL-INFORMATION>> specifying (call id b, CS call setup) =<(1, 0, value b), (2, 1, 1)>
	a1.2. [IUT >> TS_2]	**(optional)** {**CC-INFO**} message with an IE << CALLING PARTY NAME = < Presentation allowed, DECT standard or UTF-8, User-provided, verified and passed, HANDSET_TS_1_NAME > >> and with IE <<CALL-INFORMATION>> specifying (call id b) =<(1, 0, value b)>
	s2.1 [TS_2 >> IUT>> s2.2 [TS_1 >> IUT]	{**CC-ALERTING**} message **(call transfer request)** {**CC-INFO**} message with IE << MULTI-KEYPAD >> set to (1CH, 34H) digits and with IE <<CALL-INFORMATION>> specifying (call id a) =<(1, 0, value a)>
	a2. [IUT >> TS_2]	(**remote party CNIP**) {**CC-INFO**} message **with** IE <<CALLING PARTY NAME = < Presentation indicator= Presentation allowed >, < Used alphabet= DECT standard or UTF-8>, < Screening indicator= User-provided, verified and passed, < Calling party name= Phone A name > >> **and** IE <<CALL-INFORMATION>> specifying either (call id b) = <(1,0, value b> or (call id a) =<(1, 0, value a)>
Pass criteria:	Verify all answers. In a2 answer, call id b shall be used if Phone A CNIP is sent together with 'CS call under transfer call status' (and call id update from b to a); call id a shall be used if Phone A CNIP is sent in a subsequent {CC-INFO} message.	
Comments:	Phone A name is built with the 'Name' and 'First name' fields of the corresponding IUT Contact List entry.	

7.9 TC_FT_NG1.N.9 3-party conference with established external and/or internal calls tests cases

Clause 7.9 of TS 102 841 [16] shall apply.

7.10 TC_FT_NG1.N.10 Intrusion call tests cases

Clause 7.10 of TS 102 841 [16] shall apply.

7.11 TC_FT_NG1.N.11 Call deflection (external or internal) tests cases

Clause 7.11 of TS 102 841 [16] shall apply.

7.12 TC_FT_NG1.N.12 Line identification tests cases

Clause 7.12 of TS 102 841 [16] shall apply.

7.13 TC_FT_NG1.N.13 Call identification tests cases

Clause 7.13 of TS 102 841 [16] shall apply.

7.14 TC_FT_NG1.N.14 Multiple lines tests cases

Clause 7.14 of TS 102 841 [16] shall apply.

7.15 TC_FT_NG1.N.15 Multiple calls tests cases

Clause 7.15 of TS 102 841 [16] shall apply.

7.16 TC_FT_NG1.N.16 List access service tests cases

In addition to clause 7.16 of TS 102 841 [16] the following test cases shall apply.

TC_FT_NG1.N.16_BV_1707	Missed Calls List - Initiate incoming call - LiA - Initiate outgoing call from LiA		
Test purpose:	Verify that FP supports outgoing call setup from LiA just after incoming call release: - Initiate incoming call from Phone A and hang up - Open the Missed Calls List. - Initiate outgoing call from LiA session towards Phone A using first (new) entry		
Reference: Initial condition: Time sequence:	TS 102 527-1 [13], clause 7.4.10.6.2 F-00		
	s1	[USR >> Ph A]	**Perform an incoming call from Phone A towards IUT**
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2.1	[TS_1 >> IUT]	{**CC-ALERTING**}
	s2.2	[PhA]	Hang up
	a2	[IUT >> TS_1]	{**CC-RELEASE**} message
	s3.1	[TS_1 >> IUT]	{**CC-RELEASE-COM**} message
	s3.2	[TS_1]	Start timer <CC.NG.02>.
	a3	[IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<EVENTS NOTIFICATION= <Missed call, A new external missed voice call just arrived, don't care value >(=<01H,81H,xxH>) < List change indication, Missed Calls List, don't care value>(=<03H,81H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s4	[TS_1 >> IUT]	(***Open the Missed Calls List***) {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>

	a4 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s5 [TS_1 >> IUT]	<**Start session**, List identifier = 01H, nb of sorting fields =0>
	a5 [IUT >> TS_1]	<**Start session confirm**, session id=m, total nb=t, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =3>
	s6 [TS_1 >> IUT]	(*Read the 1st [new] entry*) <**Read entries**, session id=m, start index=1, direction=0, counter=1, mark entries request= 7FH, list entry field id 1..n =01H, 02H, 03H, 04H, 05H, 06H, 07H>
	a6 [IUT >> TS_1]	<**Read entries confirm**, session id=m> followed by <data packet/data packet last> with Phone A number
	s7 [TS_1 >> IUT]	(***Initiate outgoing call from LiA session towards Phone A***) {**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to 1C15H and Phone A number - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	a7.1 [IUT >> TS_1]	{**CC-CONNECT**} message with: (*if not sent before*) <<CODEC-LIST>> IE
	a7.2 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a)>
	s8 [Ph A]	**Pick up**
	a8.1 [IUT >> TS_1]	{CC-INFO} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a8.2 [TS_1 <> Ph A]	G.722 end to end connection
Pass criteria:	Verify all answers	
Comments:	In s3, timer <CC.NG.02> is defined in clause A.1 of TS 102 527-5 [15] (2 seconds)	

TC_FT_NG1.N.16_BV_1750	Missed Calls List - Empty number and name fields format used when value unavailable	
Test purpose:	Testing the Name and Number fields formats in case the CLIP and CNIP are not available on FP side.	
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.1.2 and 7.4.10.5.1.3	
Initial condition:	Date and time of the system set, 1 PP registered (TS_1 is NG PP1), Missed Calls List empty, F-00	
Time sequence:	s1 [PhA >> IUT]	Incoming call initiation on line 0 making IUT ring, with calling line identification restriction (CLIR) setup for the call
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2.1 [TS_1 >> IUT]	{**CC-ALERTING**} message
	s2.2 [USR >> PhA]	Hang up
	a2 [IUT >> TS_1]	{**CC-RELEASE**} message
	s3 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a3 [IUT >> TS_1	{**CC-CALL-PROC**} message
	s4 [TS_1 >> IUT]	<**Start session**, List identifier = 01H, nb of sorting fields =0>
	a4 [IUT >> TS_1]	<**Start session confirm**, session id=n, total nb=1, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =3>
	s5 [TS_1 >> IUT]	<**Read entries**, session id=m, start index=1, direction=0, counter=1, mark entries request= don't care value, list entry field identifier 1..n = - (at least) 01H, 02H - (optional) 03H, 04H, 05H, 06H, 07H>
	a5 [IUT >> TS_1]	<**Read entries confirm**, session id=m> followed by <data packet/data packet last> with the following fields values for the first entry: - "Number" field empty field (with length=1) - "Name" field empty field (with length=1).

	s6 [TS_1 >> IUT] {**CC-RELEASE**} message a6 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers In a5, the Name and Number field shall have a length of 1, that is, shall not contain any value (i.e. no non-empty string, even if made of white spaces)
Comments:	- In s2.1, TS_1 should send {CC-ALERTING} and then invite the user to hangup on Phone A via a display on the test equipment

TC_FT_NG1.N.16_BV_1804	No access to no implemented lists (optional list) from PP - Outgoing Calls List
Test purpose:	Test if FP can close the session when optional list is not implemented on FP
Reference:	TS 102 527-3 [14], clause 7.4.10.4.1
Initial condition:	1 PPs registered (TS_1 is NG PP1) FP does not implement Outgoing Calls List
Time sequence:	
	s1. [TS_1 >> IUT] {CC-SETUP} message with IE <<BASIC-SERVICE **LiA** >> a1. [IUT >> TS_1] {CC-CALL-PROC} s2. [TS_1 >> IUT] <**Start session**, List identifier = 01H, nb of sorting fields =0> a2. [IUT >> TS_1] <**Start session confirm**, session id=0, **Start session reject reason= list not supported**> s3. [TS_1 >> IUT] {CC-RELEASE} message a3. [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers
Comments:	-

TC_FT_NG1.N.16_BV_2004	All Calls List - Initiate outgoing call - LiA - Initiate new outgoing call from LiA
Test purpose:	Verify that FP supports outgoing call setup from LiA just after outgoing call release: - Initiate outgoing call towards Phone A and hang up - Open the All Calls List - Initiate outgoing call from LiA session towards Phone A using first (new) entry
Reference:	TS 102 527-5 [15], clauses 7.4.10.6.2 and 7.4.10.10
Initial condition:	F-00
Time sequence:	
	s1 [TS_1 >> IUT] (***Perform outgoing call towards Phone A***) {**CC-SETUP**} with: - IE <<BASIC-SERVICE>> 'Normal call setup' - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> a1 [IUT >> TS_1] (*non-early CC-CONNECT implementation*) {**CC-SETUP-ACK**} with IE <<CALL-INFORMATION>> specifying: - (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> - (line 0, full VoIP line type information) =<(0, 0, 0), (0, 5, 1)> (*early CC-CONNECT implementation*) {**CC-CONNECT**} with IE <<CALL-INFORMATION>> specifying: - (call id a) =<(1, 0, value a)> - (line 0, full VoIP line type information) =<(0, 0, 0), (0, 5, 1)> followed by: {**CC-INFO**} with IE <<CALL-INFORMATION>> specifying: - (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> s2 [TS_1 >> IUT] {**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to Phone A number - IE <<CALL-INFORMATION>> with (call id a) =<(1, 0, value a)> a2.1 [IUT >> TS_1] (*non-early CC-CONNECT implementation*) {**CC-CALL-PROC**} **OR** (*early CC-CONNECT implementation*) {**CC-INFO**} with (in both cases) IE <<CALL-INFORMATION>> specifying: - (call id a, CS call proc) =<(1, 0, value a), (2, 1, 3)>> a2.2 [IUT >> TS_1] (*non-early CC-CONNECT implementation*) {**CC-CONNECT**} **OR** (*early CC-CONNECT implementation*) {**CC-INFO**} with (in both cases) IE <<CALL-INFORMATION>> specifying:

		- (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	s3 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a3 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s4 [TS_1]	Start timer <CC.NG.02>.
	a4 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = TS_1, - (*optional*) deletion, entry id = last list entry id - addition, entry id='New outgoing call entry id', position indicator=0. - IE <<EVENTS NOTIFICATION= < List change indication, All Calls List, don't care value>(=<03H,84H,xxH>) >> and - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	s4 [TS_1 >> IUT]	(***Open the All Calls List***) **{CC-SETUP**} message with IE <<BASIC-SERVICE = **LiA** >>
	a4 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s5 [TS_1 >> IUT]	<**Start session**, List identifier = 04H, nb of sorting fields =0>
	a5 [IUT >> TS_1]	<**Start session confirm**, session id=m, total nb=t, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =4>
	s6 [TS_1 >> IUT]	<**Query supported entry fields**>
	a6 [IUT >> TS_1]	<**Query supported entry fields confirm**, session id=m> with: - editable fields: 07H (Read status) - non-editable fields: 01H 02H 03H 04H 05H 06H 08H
	s7 [TS_1 >> IUT]	(*Read the [1st] new entry*) <**Read selected entries**, session id=m, mark entries request= don't care, list entry field id 1..n =01H, 02H, 03H, 04H, 05H, 06H, 07H, 08H, Selection=(type='selection from entry ids, description=(nb=1, entry id1=entry id of outgoing call toward Phone A)) >
	a7 [IUT >> TS_1]	<**Read selected entries confirm**, session id=m, counter=1> followed by: <**data packet/data packet last**> with entry id 1 and content with Phone A number
	s8 [TS_1 >> IUT]	(***Initiate outgoing call from LiA session towards Phone A***) {**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> set to 1C15H and Phone A number - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
	a8.1 [IUT >> TS_1]	{**CC-CONNECT**} message with: (*if not sent before*) <<CODEC-LIST>> IE
	a8.2 [IUT >> TS_1]	{**CC-INFO**} with IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a)>
	s9 [Ph A]	**Pick up**
	a9.1 [IUT >> TS_1]	{CC-INFO} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a9.2 [TS_1 <> Ph A]	G.722 end to end connection
Pass criteria:	Verify all answers	
Comments:	At s4, timer <CC.NG.02> is defined in clause A.1 of TS 102 527-5 [15] (2 seconds). At a4, list change indications could be sent for other lists (if implemented) also impacted by the call (not tested). At s7, in real life TS_1 would probably not access the list for its own changes (the position indicator that it may need from the FP is in the extended notification itself).	

TC_FT_NG1.N.16_BV_2005	All Calls List - Read status editing - uniform modification over all other call lists
Test purpose:	Testing that the read status value is uniform over **All Calls List**, **Missed Calls List** and **All Incoming Calls List** especially when it is modified (for missed calls only) 1- LiA session with All Calls List for marking some entries as read 2- Query supported entry fields (including Part 5 specific fields) 3- Close the list access service 4- Notifications for the modified Read status fields 5- LiA session with Missed Calls List and All Incoming Calls List (if implemented by IUT) to check uniform modification 6- Close the list access service
Reference:	TS 102 527-3 [14], clauses 7.4.10.4.3.1 (Read entries) and 7.4.10.9 (Extended notifications)
Initial condition:	All Calls List content (see clause 4.1.1.1.5; includes two Part 5 specific fields) IUT is NG PP1, TS_1 is NG FP T-00
Time sequence:	1-LiA session with All Calls List for marking some entries as read s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id=04H (All Calls List), nb of sorting fields =0 (default sorting)> a2 [IUT >> TS_1] <**Start session confirm**, session id=si, total nb=30, discriminator type=0, nb of sorting fields =n,sorting field id 1..n =don't care values> 2-Query supported entry fields s3 [TS_1 >> IUT] <**Query supported entry fields**> a3 [IUT >> TS_1] < **Query supported entry fields confirm**, session id=si> with: - editable fields: 07H (Read status) - non-editable fields: 01H 02H 03H 04H 05H 06H 08H s4 [TS_1 >> IUT] <**Read entries**, session id=si, start index=1, direction=0, counter=8, mark entries request= 7FH (mark as read), list entry field id 1..n = ∅> a4 [IUT >> TS_1] <**Read entries confirm**, session id=si>, followed by no data packet 3- Close the list access service s5 [TS_1 >> IUT] <**End session**, session id=s> a5 [IUT >> TS_1] <**End session confirm**, session id=s> s6 [TS_1 >> IUT] {**CC-RELEASE**} message a6.1 [IUT >> TS_1] {**CC-RELEASE-COM**} message 4- Notifications for the modified Read status fields a6.2 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**List Change Details**>> with: - originating PP = PP1, - modification, entry id = id of entry with index 1 - modification, entry id = id of entry with index 5 - modification, entry id = id of entry with index 8 - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity= 30 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0 a6.3 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of Missed call/'No new missed call arrived' - event multiplicity=0 unread messages (=<01H,82H,80H>) - event type/subtype of List change indication/Missed Calls List - event multiplicity=10 message in total (=<03H,82H,8AH>) - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0 5-LiA sessions with Missed Calls List and All Incoming Calls List

		to check uniform modification
		Perform s9..a11 for LI = 01H (Missed Calls List) and (if NG1.N.16_23 implemented) for LI=09H (All Incoming Calls List)
	s9 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a9 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s10 [TS_1 >> IUT]	<**Start session**, List id=LI, nb of sorting fields =n (n ≥ 0) followed by 01H 02H 03H 04H 05H 06H 07H>
	a10 [IUT >> TS_1]	<**Start session confirm**, session id=si, total nb=t, discriminator type=d, nb of sorting fields =1, sorting field id1 ='Date and Time>
	s11 [TS_1 >> IUT]	<**Read entries**, session id=si, start index=1, direction=0, counter=6, mark entries request= 00H (leave unchanged), list entry field id 1..n = 04H (Read status)>
	a11 [IUT >> TS_1]	<**Read entries confirm**, session id=si>, followed by <**data packet/data packet last**> with the 6 requested entries with Read status field 'unread'
		6- Close the list access service
	s5 [TS_1 >> IUT]	<**End session**, session id=s>
	a5 [IUT >> TS_1]	<**End session confirm**, session id=s>
	s6 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a6.1 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:		
Comments:	At s3, if IUT uses command 'query supported entry fields', the tester indicates the Part 5 specific fields of the All Calls List ('Read status' and 'Number Of Calls'). At s4, the All Calls List in clause 4.1.1.1.5 has 3 unread entries at indices 1, 5, 8. At a6.3 the Missed Calls List in clause 4.1.1.1.1 has (before marking as read) 3 unread entries at indices 1, 2, 4 (but extended notification is not used for this list). From s9 to a9, TS_1 may use the List of Supported lists to determine if NG1.N.16_23 is implemented by IUT. At s11 the All Incoming Calls list has (before marking as read) 3 unread entries at indices 1, 3, 6. Counter value 6 is therefore convenient for both lists. At a6.2 and a6.3, no notification is sent for the 'All Incoming Calls List' as it is not mandatory for this list (see TS 102 527-5 [15], clause 7.4.10.2.2).	

TC_FT_NG1.N.16_BV_2006	All Calls list - Delete list - Read entries with list empty	
Test purpose:	1- Open LiA session and delete all calls list 2- Start timer <CC.NG.02> in order to check notification sending time by FP 3- Check notification content (delete list implies full resync request even for All Calls List) 4- Open new LiA session and check sending of negative acknowledgement	
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6, TS 102 527-5 [15], clauses 7.4.10.9.1 and 7.4.10.9.2.2	
Initial condition:	Service call in F-00	
Time sequence:		1- Open LiA session and delete all calls list.
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA**>>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, List id = 04H, nb of sorting fields =0>
	a2 [IUT >> TS_1]	<**Start session confirm**, session id=n, total nb=t, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =3>
	s3 [TS_1 >> IUT]	<**Delete list**, session id=n>
	a3 [IUT >> TS_1]	<**Delete list confirm**, session id=n>
	s4 [TS_1 >> IUT]	{**CC-RELEASE**}
	a4 [IUT >> TS_1]	{**CC-RELEASE-COM**}message
		2- Start timer <CC.NG.02>; check notification sending time by FP
	s5 [TS_1]	Start timer <CC.NG.02>
		3- Check notification content (delete list implies full resync request)
	a5.1 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**}message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	a5.2 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of Missed call/'No new missed call arrived' - event multiplicity=0 unread messages (=<01H,82H,80H>) - event type/subtype of List change indication/Missed Calls List - event multiplicity= 0 message in total (=<03H,81H,80H>) - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	a5.3 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> IE with: - event type/subt='List change ind./Incoming Accepted Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
	a5.4 [IUT >> TS_1]	(*IF IUT supports NG1.N.16_18 "Outgoing calls list", (before <CC.NG.02>)* {**FACILITY**} message with: - <<**Events Notification**>> IE with: - event type/subtype of 'List change ind./Outgoing Calls List' - event multiplicity= 0 message in total - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = lid0
		4- Open new LiA session and check sending of negative ack
	s5 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA**>>
	a5 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s6 [TS_1 >> IUT]	<**Start session**, List id = 04H, nb of sorting fields =0>
	a6 [IUT >> TS_1]	<**Start session confirm**, session id=m, total nb=0, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =3>
	s7 [TS_1 >> IUT]	<**Read entries**, session id=m, start index=1, direction=0, counter=1, mark entries request= 00H, list entry field id 1..n =01H, 02H, 03H, 04H, 05H, 06H >
	a7 [IUT >> TS_1]	<**Negative acknowledgement**, session id=m, reject reason= invalid range>
	s8 [TS_1 >> IUT]	<**End session**, session id=n>

	a8 [IUT >> TS_1]	<**End session confirm**, session id=m>
	s9 [TS_1 >> IUT]	{**CC-RELEASE**}
	a9 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers At a5.1, IUT uses a full resync request (although the All Calls List supports extended notifications) because the list was emptied (see clause 7.4.10.9.1)	

TC_FT_NG1.N.16_BV_2007	All Calls List - Create entries -- Check entries content	
Test purpose:	1- Fill in the All Calls List with 4 entries (was empty) 2- Check notification sending time (<CC.NG.02>) and notification format; sending time check is only made at the end of all 4 calls 3- Open new LiA session and check new entries content	
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6, TS 102 527-5 [15], clause 7.4.10.9.2.2	
Initial condition:	Date and time of the system set, 2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), All Calls List empty (see TC_FT_NG1.N.16_BV_2006) CLIP_B and Number_B are two (possibly equal) representations of Phone B number CLIP_A and Number_A are two (possibly equal) representations of Phone A number Contact list does not contain any entry with either Phone A or Phone B number (no matching possible) F-00	
Time sequence:		1- Fill in the All Calls List with 4 entries (was empty)
	s1.1 [TS_1 >> IUT]	Perform an outgoing call on line 0 to Phone B (Number_B)
	s1.2 [USR >> Ph B]	Pick up call
	s1.3 [Ph A >> IUT]	Perform an incoming call on line 0 from Phone A (CLIP_A, CNIP_A)
	s1.4 [USR >> TS_1]	Pick up call
	s1.5 [TS_2 >> IUT]	Perform an outgoing call on line 0 to Phone A (Number_A)
	s1.6 [USR >> Ph A]	Pick up call
	a1	None
	s2 [Ph B >> IUT]	Perform an incoming call on line 0 to make TS_1 and TS_2 ring
	a2 [IUT >> TS_1,2]	{**CC-SETUP**} message with - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - << SIGNAL value= '41H' ('Alerting on - pattern 1')>> - <<CALLING PARTY NUMBER =<CLIP_B> >> - <<CALLING PARTY NAME = < Presentation allowed, UTF-8, Network provided, CNIP_B> >> - <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, **CS call setup**) =<(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,1)>
	s3.1 [TS_1,2 >> IUT]	{**CC-ALERTING**} message
	s3.2 [TS_1 >> USR]	*User invited to hang up on Phone B*
	s3.3 [USR >> Ph B]	Hang up
	a3 [IUT >> TS_1,2]	{**CC-RELEASE**} message
	s4.1 [TS_1,2 >> IUT]	{**CC-RELEASE-COM**} message
		2- Check notification sending time (<CC.NG.02>) and format
	s4.2 [TS_1]	Start timer <CC.NG.02>
	a4.1 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity= 4 message in total - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0 - IE <<**List change details**>> - (addition, entry id = u1, position indicator = 0) - (addition, entry id = u2, position indicator = 0) - (addition, entry id = u3, position indicator = 0) - (addition, entry id = u4, position indicator = 0)

	a4.2 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of Missed call/'No new missed call arrived' - event multiplicity=1 unread messages (=<01H,82H,81H>) - event type/subtype of List change indication/Missed Calls List - event multiplicity=1 message in total (=<03H,81H,81H>) - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0
	a4.3 [IUT >> TS_1]	(*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> IE with: - event type/subt='List change ind./Incoming Accepted Calls List' - event multiplicity= 1 message in total - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0
	a4.4 [IUT >> TS_1]	(*IF IUT supports NG1.N.16_18 "Outgoing calls list", (before <CC.NG.02>)* {**FACILITY**} message with: - <<**Events Notification**>> IE with: - event type/subtype of 'List change ind./Outgoing Calls List' - event multiplicity= 2 message in total - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0
		3- Open new LiA session and check new entries content
	s5 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a5 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s6 [TS_1 >> IUT]	<**Start session**, List id = 04H, nb of sorting fields =0>
	a6 [IUT >> TS_1]	<**Start session confirm**, session id=n, total nb= 4, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =4>
	s7 [TS_1 >> IUT]	<**Read selected entries**, session id=n, mark entries request= 00H, list entry field id 1..n = - 01H, Call type - 02H, Number - 03H, Name - 04H, Date and Time - 05H, Line name - 06H, Line id >
	a7 [IUT >> TS_1]	< **Read selected entries confirm**, session id=n> followed by <**data packet/data packet last**> with the following 4 entries in the given order (fields as in s6): - (u4, "Missed call", CLIP_B, CNIP_B, dt1, FT_IXIT_28, (0,0,lid0)) - (u3, "Outgoing call", Number_A, ∅, dt2, FT_IXIT_28, (0,0,lid0)) - (u2, "Accepted call", CLIP_A, CNIP_A, dt3,FT_IXIT_28,(0,0,lid0)) - (u1, "Outgoing call", Number_B, ∅, dt4, FT_IXIT_28, (0,0,lid0)) where dt1 > dt2 > dt3 > dt4 (ordering by recency)
	s8 [TS_1 >> IUT]	<**End session**, session id=n>
	a8 [IUT >> TS_1]	<**End session confirm**, session id=n>
	s9 [TS_1 >> IUT]	{**CC-RELEASE**}
	a9 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all entries	
Comments:	- From s1.1 to a2, calls (outgoing or incoming) are initiated and terminated sequentially. Purpose is only to create new entries in the 'All Calls List'. The calls are chosen so that NO merging of entries is possible in the list. At s4.2, timer <CC.NG.02> is only triggered after 4 calls, instead of after each call as required by the standard (weakened test). At a4.1 the list change details could be sent in several {FACILITY} messages (e.g. one for each call). From a4.2 to a4.4, the notifications (with no change details) could be sent several times (e.g. once for each call). - At a7, CLIP_B, CNIP_B in u4 shall be the same values as used previously in a2 - At a7, Number_A in u3 shall be the same value as used previously in s1.5 - At a7, CLIP_A, CNIP_A in u2 shall be the same values as used previously in s1.3 - At a7, Number_B in u1 shall be the same value as used previously in s1.1 - At a7, FT_IXIT_28 is the "Line name" field of line 0 (see clause A.2.2)	

TC_FT_NG1.N.16_BV_2008	All Calls List - Delete entry - Negative acknowledgement (or not)
Test purpose:	1- Open new LiA session with All Calls List as created in TC_FT_NG1.N.16_BV_2007 2- Delete entry with wrong session id (negative acknowledgement) 3- Delete first entry with entry id u4 (success); check extended notification 4- Delete entry with wrong (unexisting) entry id (negative acknowledgement) 5- Close LiA session
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6, TS 102 527-5 [15], clause 7.4.10.9.2.2
Initial condition:	Run TC_FT_NG1.N.16_BV_2007 before Entry ids in the list are (u4, u3, u2, u1) (in this order)
Time sequence:	1- Open new LiA session s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = 04H, nb of sorting fields =0> a2 [IUT >> TS_1] <**Start session confirm**, session id=n, total nb= 4, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =4> s3 [TS_1 >> IUT] <**Read entries**, session id=n, start index=1, direction=0, counter=1, mark entries request= 00H, list entry field id 1..n =01H 02H 03H 04H 05H 06H> a3 [IUT >> TS_1] <**Read entries confirm**, session id=n> followed by <**data packet/data packet last**> with 1st entry (entry id=u4) 2- Delete entry with wrong session id (negative acknowledgement) s4 [TS_1 >> IUT] <**Delete entry**, session id=n+1, entry id=u4> a4 [IUT >> TS_1] <**Negative acknowledgement**, session id=n+1, reject reason= invalid session number > Delete first entry with entry id u4 (success); check extended notif s5 [TS_1 >> IUT] <**Delete entry**, session id=n, entry id=u4> a5 [IUT >> TS_1] <**Delete entry confirm**, session id=n, total nb of avail. entries=3> 4- Delete entry with wrong (unexisting) entry id (negative ack) s6 [TS_1 >> IUT] <**Delete entry**, session id=n, entry id = u5 = max(u1,u2,u3,u4)+1> a6 [IUT >> TS_1] <**Negative acknowledgement**, session id=n, reject reason=entry not available> 5- Close LiA session s7 [TS_1 >> IUT] <**End session**, session id=n> a7 [IUT >> TS_1] <**End session confirm**, session id=n> s8 [TS_1 >> IUT] {**CC-RELEASE**} a8 [IUT >> TS_1] {**CC-RELEASE-COM**} message s9 [TS_1] Start timer <CC.NG.02> a9.1 [IUT >> TS_1] (*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of 'List change indication/All Calls List' - event multiplicity= 3 message in total - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0 - IE <<**List change details**>> - (deletion, entry id = u4) a9.2 [IUT >> TS_1] (*before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**Events Notification**>> with: - event type/subtype of Missed call/'No new missed call arrived' - event multiplicity=1 unread messages (=<01H,82H,81H>) - event type/subtype of List change indication/Missed Calls List - event multiplicity=1 message in total (=<03H,81H,81H>) - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0
Pass criteria:	Verify all answers
Comments:	At s6, u5 is chosen so that it is invalid on IUT side. At s9, timer is started after end of session because the modifications on the lists are made by the PP (see clause 7.4.10.9.2.2, sending time). The notifications could however be sent earlier.

TC_FT_NG1.N.16_BV_2112	Contact List - Handling of three contact numbers	
Test purpose:	Check that the FP respects the rules concerning the handling of multiple field instances 1- Save more contact numbers than supported by IUT (allowed) 2- Request only one number and attempt to save two numbers ('Procedure not allowed') 3- Request two contact numbers (and receive them) but save only one ('Proc not allowed') 4- Edit only the first contact number, leave others unchanged (allowed) 5- Remove the first contact number (allowed)	
Reference: Initial condition:	TS 102 527-3 [14], clauses 7.4.10.5.7 and 7.4.10.1, 'Field instances management' entry Contact List filled for test (see TC_FT_NG1.N.16_BV_2102), Service call in F-03 a = (fixed) 00441324778824, and b = (work) 00449876543210 are the telephone numbers of the first contact of the Contact List. d = (mobile) 00441234567890 is an additional contact created for the purpose of the present test case. e = (fixed) 00441324778825 (= contact (a) with last digit modified from 4 to 5). ∅ represents an empty contact number field. m (defined in a2) is the number of contact numbers supported by IUT.	
Time sequence:	s1 [TS_1 >> IUT]	<**Start session**, List id = 05H, nb of sorting fields =0>
	a1 [IUT >> TS_1]	<**Start session confirm**, session id=s, total nb=6, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields >
	s2 [TS_1 >> IUT]	<**Query supported entry fields**>
	a2 [IUT >> TS_1]	< **Query supported entry fields confirm**, session id=s>. with editable entry fields including field 03H ('Contact number') **m times with m ≥ 2**.
	s3 [TS_1 >> IUT]	<**Read entries**, session id=s, start index=1, direction=0 (forward), counter=01H, mark entries request= 00H, list entry field id 1..n =02H>
	a3 [IUT >> TS_1]	<**Read entries confirm**, session id=s, start index=1, counter=1> followed by <data packet/data packet last> with entry id u and 'First name' field 'Christian'.
		1- *Save more contact numbers than supported by IUT (allowed)*
	s4 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = at least **03H (m+1 times** with m+1 ≥ 3**)**>
	a4 [IUT >> TS_1]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact numbers set to (a,b)
	s5 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact numbers set to (a, b, d, …, d) (contact d present m-1 times so that m+1 contacts are attempted to be saved)
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a5.2 [IUT >> TS_1]	(*If m ≠ 2*) {**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = TS_1, - modification, entry id=u, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Contact List' - event multiplicity=6 entries in total - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
		2- *Request only one number and attempt to save two numbers*
	s6 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = at least 03H (only one time)>
	a6 [IUT >> TS_1]	<**Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact numbers set to (a) only
	s7 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact numbers set to (a, d)
	a7 [IUT >> TS_1]	<**Negative acknowledgement**, reason='Procedure not allowed'>
		3- *Request two contact numbers (and receive them) but save only one*
	s8 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=u, list entry field id 1…n = **03H**

		(2 times) >
	a8 [IUT >> TS_1]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact numbers set to (a, b).
	s9 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact numbers set to (d) only
	a9 [IUT >> TS_1]	<**Negative acknowledgement**, reason='Procedure not allowed'>
		4- *Edit only the first contact number, leave others unchanged*
	s10 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = **03H** (only one time)>
	a10 [IUT >> TS_1]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact number (a).
	s11 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact number set to (e).
	a11.1[IUT >> TS_1]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a11.2[IUT >> TS_1]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = TS_1, - modification, entry id=u, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Contact List' - event multiplicity= 6 entries in total - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
		Check if IUT data base is still correct using 'Read selected entries'
	s12 [TS_1 >> IUT]	<**Read selected entries**, session id=s, mark entries request= 00H, list entry field id 1..n = at least **03H (m times**), Selection = (type = 'selection from entry ids', description=(nb=1, entry id1=u) >
	a12 [IUT >> TS_1]	<**Read selected entries confirm**, session id=s, counter=1> followed by: <**data packet/data packet last**> with entry id u and with contact numbers set to (e, b, d, …, d), with d being present m-2 times (possibly 0 time)
		Remove the first contact number
	s13 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=u, list entry field id 1..n = at least **03H (m times)**>
	a13 [IUT >> TS_1]	< **Edit entry confirm**, session id=s> followed by <data packet/data packet last> with contact numbers (e, b, d, …, d), with d being present m-2 times (possibly 0 time).
	s14 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id =u > followed by <data packet/data packet last> with contact numbers set to (∅, b, d, …, d), with d being present m-2 times (possibly 0 time).
	a14.1[IUT >> TS_1]	<**Save entry confirm**, session id=s, entry id=u, position index=1, total nb of available entries= 6>
	a14.2[IUT >> TS_1]	{**FACILITY**} message with: - IE <<LIST CHANGE DETAILS>> with: - originating PP = TS_1, - modification, entry id=u, position indicator=0 - IE <<EVENTS NOTIFICATION>> with: - event type/subtype of 'List change indication/Contact List' - event multiplicity=6 entries in total - IE<<CALL-INFORMATION>> specifying (line 0) =<(0, 0, lid0)>
		Check if IUT data base is still correct using 'Read selected entries'
	s15 [TS_1 >> IUT]	<**Read selected entries**, session id=s, mark entries request= 00H, list entry field id 1..n = at least **03H (m times**), Selection = (type = 'selection from entry ids, description=(nb=1, entry id1=u) >
	a15 [IUT >> TS_1]	<**Read selected entries confirm**, session id=s, counter=1> followed by: <**data packet/data packet last**> with entry id u and with contact numbers set to (b, d, …, d), with d being present m-2 times (possibly 0 time)

	s16 [TS_1 >> IUT] <**End session**, session id=s> a16 [IUT >> TS_1] <**End session confirm**, session id=s> s17 [TS_1 >> IUT] {**CC-RELEASE**} message a17 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers After a5 verify that d is saved max(0, m-2) times only. After a11 verify that telephone number 'a' was removed from the first contact.
Comments:	At s2, TS_1 checks how many instances the FP supports; this is at least 2. From s4 to a5.2: TS_1 tries to edit/save one more number than supported by the FP (at least 3). At a5.2 presence of notification is only checked if the entry is actually modified (i.e. if m≠2). Some FPs might however send a notification as soon as the entry is successfully saved. From s6 to a7: TS_1 requests only one contact number in the edit (and receives it), but then tries to save 2 contact numbers (which would erase the 2nd contact number that we didn't request in the edit) and verifies it gets 'Procedure not allowed. From s8 to a9: Conversely, TS_1 requests 2 numbers (and should receive them because they are available), but then only saves one of them (again, Procedure not allowed). From s10 to a12: TS_1 modifies the first contact number (a) to (e) and checks this is done correctly in a12. In real life TS_1 would probably not access the list for its own changes. From s13 to a15: TS_1 removes the first contact number (a), by using an empty contact field (represented below by ∅ for conciseness) and check this is done correctly in a16. In real life TS_1 would probably not access the list for its own changes.

TC_FT_NG1.N.16_BV_2115	Contact List - Fast browsing support with overlap control
Test purpose:	Check that the FP supports a quick walk through the list entries without error (e.g. for some MMI; the user presses "next" key several times in order to access another part of the list)
Reference:	TS 102 527-3 [14], clauses 7.4.10.1 ('Command overlap forbidden' subsection), 7.4.10.4.3 and 7.4.10.5.7
Initial condition:	TS_1 indicates "Support of the extended list change indication" Contact List on IUT as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) N: number of successive Read entries commands sent by tester (commands 2 to N have to overlap the first one) M: number of these consecutive Read entries that are correctly answered by the FT. If M < N, all Read entries command from the $(M+1)^{th}$ one are ignored by FT ($1 \leq M \leq N$). Service call in F-00
Time sequence:	s1 [TS_1 >> IUT] {CC-SETUP} message with IE <<BASIC-SERVICE <LiA service setup, Wideband speech default setup attributes> >> a1 [IUT >> TS_1] {CC-CALL-PROC} message s2 [TS_1 >> IUT] <**Start session**, List identifier = 05H, nb of sorting fields =0> a2 [IUT >> TS_1] <**Start session confirm**, session id=n, total nb=25, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields > s3 [TS_1 >> IUT] (*for* s = 1 *to* N) <**Read entries**, session id=n, start index=s, direction=0 (forward), counter=3, mark entries request= 00H, list entry field id 1..n = 01H 02H 03H 03H 05H> a3 [IUT >> TS_1] (*for* s = 1 *to* M*, with* $1 \leq M \leq N$) <**Read entries confirm**, session id=n, start index=s, counter=3> followed by <data packet/data packet last> with the 3 requested entries s4 [TS_1 >> IUT] <**End session**, session id=n> a4 [IUT >> TS_1] <**End session confirm**, session id=n> s5 [TS_1 >> IUT] {CC-RELEASE} message a5 [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers In a3, verify that IUT does not crash and that if it correctly answers the first M 'Read entries' command(s) and ignores the $(M+1)^{th}$ one, it also ignores (if any) the following N-M-1 overlapping 'Read entries' (i.e. assuming that M≤N-2). In a3, verify that the 'Read entries confirm' commands received (are related data packets) **do** correspond to the **first M** consecutive 'Read entries' commands sent (to verify this, note that consecutive answers have two entries in common).
Comments:	In s3, 'Read entries' from s=2 to N are overlapping the initial Read entries (with s=1). In s3, presence of field id '03'H twice is explained at the beginning of clause 7.16, 'Multiple instances of the 'contact number' field in the Contact List'. The purpose of the "Support of extended list change indication" in initial condition is to place IUT in most stressing conditions when fast browsing occurs.

TC_FT_NG1.N.16_BV_2116	Contact List - Read entries command response time - one entry read
Test purpose:	Check FP response time when a single entry is read (the 25th entry of the list is used)
Reference:	TS 102 527-3 [14], clause 7.4.10.1, "Guarantee of interactivity for the user"
Initial condition:	Contact List as in TC_FT_NG1.N.16_BV_2114 on IUT Service call in F-03
Time sequence:	s1 [TS_1 >> IUT] <**Start session**, List identifier = 05H, nb of sorting fields =0> a1 [IUT >> TS_1] <**Start session confirm**, session id=n, total nb=25, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields > s2 [TS_1 >> IUT] <**Read entries**, session id=n, start index=25, direction=0 (forward), counter=01H, mark entries request= 00H, list entry field id 1..m = 01H 03H 03H> a2 [IUT >> TS_1] (*after less than* P100) <**Read entries confirm**, session id=n, start index=25, counter=1> followed by: - (**optional**) <data packet> - <**data packet last**> with the requested entry fields s3 [TS_1 >> IUT] <**End session**, session id=n> a3 [IUT >> TS_1] <**End session confirm**, session id=n> s4 [TS_1 >> IUT] {CC-RELEASE} message a4 [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers In a2 verify that the answer to the 'Read entries' command has been totally received within interval [t, t+ P100], where t is the command sending end time.
Comments:	In stimulus s2, presence of field id '03'H twice is explained at the beginning of clause 7.16, 'Multiple instances of the 'contact number' field in the Contact List'. P100 constant is defined in TS 102 527-3 [14], clause A.4. The read entry fields are chosen so that the answer fits in a single 'data packet last'. However, non-optimal IUT implementations could use a data packet (in addition to the data packet last). Such implementations are still subject to the maximum response time.

TC_FT_NG1.N.16_BV_2150	Contact List - Search entries - Searched letter not in list
Test purpose:	Test that the FP correctly handles a search with search string equal to one letter that is not present as first letter of the search field in any entry of the list
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.7, 7.4.10.4.8 and 7.4.10.1, 'Field instances management' entry
Initial condition:	Contact List filled for test (see TC_FT_NG1.N.16_BV_2102), Service call in F-03
Time sequence:	s1. [TS_1 >> IUT] <**Start session**, List identifier = 05H, nb of sorting fields =0> a1. [IUT >> TS_1] <**Start session confirm**, session id=n, total nb=6, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields > s2. [TS_1 >> IUT] <**Search entries**, session id=n, matching option=00H, searched value='C', direction=0, counter=01H, mark entries request= 00H, list entry field identifier 1..n =01H, 02H, 03H, 03H, 04H, 05H> a2. [IUT >> TS_1] <**Search entries confirm**, session id=n, start index=don't care value, direction=0, counter=0> without <data packet/data packet last> s3. [TS_1 >> IUT] <**Search entries**, session id=n, matching option=01H, searched value='C', direction=0, counter=01H, mark entries request= 00H, list entry field identifier 1..n =01H, 02H, 03H, 03H, 04H, 05H> a3. [IUT >> TS_1] <**Search entries confirm**, session id=n, start index=4, direction=0, counter=1> followed by <data packet/data packet last> with entry created in TC_FT_NG1.N.16_BV_2102 step 2 (FENJIRO Carlos) s4. [TS_1 >> IUT] <**Search entries**, session id=n, matching option=02H, searched value='C', direction=0, counter=01H, mark entries request= 00H, list entry field identifier 1..n =01H, 02H, 03H, 03H, 04H, 05H> a4. [IUT >> TS_1] <**Search entries confirm**, session id=n, start index=3, direction=0, counter=1> > with entry created in

	TC_FT_NG1.N.16_BV_2102 step 5 (ALOUSSI Ramin) s5. [TS_1 >> IUT] <**End session**, session id=n> a5. [IUT >> TS_1] <**End session confirm**, session id=n> s6. [TS_1 >> IUT] {CC-RELEASE} message a6. [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers
Comments:	In stimuli s2 to s4, presence of field id '03'H twice is explained at the beginning of clause 7.16, 'Multiple instances of the 'contact number' field in the Contact List'

TC_FT_NG1.N.16_BV_2151	Contact List - Search entries - Consecutive successful searches
Test purpose:	Test that the FP is able to handle two successful consecutive searches at different parts of the list (search back in the list)
Reference:	TS 102 527-3 [14], clauses 7.4.10.5.7, 7.4.10.4.8 and 7.4.10.1 'Field instances management' entry
Initial condition:	Contact List filled for test (see TC_FT_NG1.N.16_BV_2102), Service call in F-03
Time sequence:	s1. [TS_1 >> IUT] <**Start session**, List identifier = 05H, nb of sorting fields =0> a1. [IUT >> TS_1] <**Start session confirm**, session id=n, total nb=6, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields > s2. [TS_1 >> IUT] <**Search entries**, session id=n, matching option=02H, searched value='Z', direction=0, counter=01H, mark entries request= 00H, list entry field identifier 1..n =01H, 02H, 03H, 03H, 04H, 05H> a2. [IUT >> TS_1] <**Search entries confirm**, session id=n, start index=6, direction=0, counter=1> followed by <data packet/data packet last> with entry created in TC_FT_NG1.N.16_BV_2102 step 4 (UWE Markus) s3. [TS_1 >> IUT] <**Search entries**, session id=n, matching option=01H, searched value='C', direction=0, counter=01H, mark entries request= 00H, list entry field identifier 1..n =01H, 02H, 03H, 03H, 04H, 05H> a3. [IUT >> TS_1] <**Search entries confirm**, session id=n, start index=4, direction=0, counter=1> followed by <data packet/data packet last> with entry created in TC_FT_NG1.N.16_BV_2102 step 2 (FENJIRO Carlos) s4. [TS_1 >> IUT] <**End session**, session id=n> a4. [IUT >> TS_1] <**End session confirm**, session id=n> s5. [TS_1 >> IUT] {CC-RELEASE} message a5. [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers
Comments:	In stimuli s2 to s3, presence of field id '03'H twice is explained at the beginning of clause 7.16, 'Multiple instances of the 'contact number' field in the Contact List'

TC_FT_NG1.N.16_BV_3902	Line Settings List - Line id/Line name - Save entry with editable and non-editable fields
Test purpose:	Check that the FP works in best effort mode: still saving editable fields, although it also receives a non-editable field in the 'save entry' command.
Reference:	TS 102 527-3 [14], clauses 7.4.10.4.9 and 7.4.11.4.1
Initial condition:	Line Settings List open (session id=n)
Time Sequence:	s1. [TS_1 >> IUT] <**Read entries**, session id=n, start index=1, direction=0, counter=1, mark entries request= 00H, list entry field id 1 =01H, 02H> a1. [IUT >> TS_1] <**Read entries confirm**, session id=n> followed by <**data packet/data packet last**> with entry content (entry id = u) s2. [TS_1 >> IUT] <**Edit entry**, session id=n, entry identifier=u, list entry field id 1,2 =01H,02H> a2. [IUT >> TS_1] <**Edit entry confirm**, session id=n> followed by <**data packet/data packet last**> with entry content (entry id = u) s3. [TS_1 >> IUT] <**Save entry**, session id=n, entry id=u> followed by <**data packet/data packet last**> with: - Line name field set to "My First Line" and - Line id field set to 0. a3. [IUT >> TS_1] <**Negative acknowledgement**, session id=n, reject reason = 'Procedure not allowed'> s4. [TS_1 >> IUT] <**Read entries**, session id=n, start index=1, direction=0, counter=1, mark entries request= 00H, list entry field id 1=01H,02H> a4. [IUT >> TS_1] <**Read entries confirm**, session id=n, start index=1, counter=1> followed by <**data packet/data packet last**> with Line name field set to "My First Line" and Line id field set to 0. s5. [TS_1 >> IUT] <**End session**, session id=n> a5. [IUT >> TS_1] <**End session confirm**, session id=n> s6. [TS_1 >> IUT] {CC-RELEASE} message a6 [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	- Verify all answers - Verify in a4 that, following s3, the new *Line name* value was still saved, although the non-editable *Line id* field causes a *Negative acknowledgement* in a3 (best effort mode)
Comments:	- Although line name editability is *manufacturer defined* in the Line Settings List, IUT has to be in a configuration where this field is editable for performing the present test

TC_FT_NG1.N.16_BV_6000(P,S)	LiA/Voice call interactions - List access with first external outgoing voice call initiation - Audio(P=called phone, S=LiA initial slot type) **(Parameterized test)**
Test purpose:	Check that FP supports PP opening LiA session with slot type S (full or long slot), then that FP supports PP initiating a first (pseudo-parallel) outgoing call with P and that FP initiates a codec change if needed as described in TS 102 527-3 [14], clause 7.4.10.6.2. Check ring back tone and then voice call audio
Reference:	TS 102 527-1 [13], clauses 7.3.3 and 7.3.4, TS 102 527-3 [14], clauses 7.4.10.6.2 and 7.4.15.1
Initial condition:	P = called party (Phone A or Phone C) Missed Calls List content as in clause 4.1.1.1.2. P (and P number) added to the Missed Calls List cP = codec required to call P (G.722 for P=Phone A, G.726 for Phone C) scP = slot type required by cP d = default codec used by FP sd = slot type required by codec d TS_1 is NG PP1, TS_2 is NG PP2. If FT_IXIT_11, TS_2 is simultaneously accessing the same list. F-00
Time sequence:	s1.1 [TS_1 >> IUT] Connection with slot type 'S' on MAC layer s1.2 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message with: - (**optional**) IE <<CODEC LIST>> set to d s2.1 [TS_1 >> IUT] (*If <<CODEC-LIST>> present and* S ≠ sd) Slot type modification to sd s2.2 [TS_1 >> IUT] Start session with the Missed Calls List and simulate browsing of that list until P entry is reached s2.3 [TS_1 >> IUT] (*Call* P, *without ending LiA session)* {**CC-INFO**} with: - IE <<MULTI-KEYPAD>> set to 1C15H and P number - IE <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)> a2 [IUT >> TS_1] {**CC-CONNECT**} message with: - (*If not added before*) IE <<CODEC LIST>> set to d s3 [TS_1 >> IUT] (*If <<CODEC-LIST>> present in {CC-CONNECT} and* S ≠ sd) Slot type modification to sd a3.1 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying at least (line 0, **line type information**, call id a) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a)> a3.2 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call alerting**) =<(1, 0, value a), (2, 1, 4)>, or, if it is not the case, that P rings. a3.3 [IUT >> TS_1] (*Optional*) {**CC-INFO**} message with IE <<SIGNAL>> with value 01H indicating 'Ring back tone on' a3.4 [USR] (*if <<SIGNAL>> IE absent*) network originating in-band ring back tone can be heard on TS_1 (*If* d ≠ cP *perform* a3.5 *to* a5) a3.5 [IUT >> TS_1] {**CC-SERVICE-CHANGE**} with IE <<CODEC-LIST cP >> s4 [TS_1 >> IUT] {**CC-SERVICE-ACCEPT**} message a4 [IUT >> TS_1] {IWU-INFO} with IE <<CODEC-LIST >> set to cP s5 [TS_1 >> IUT] {IWU-INFO} with IE <<CODEC-LIST>> set to cP a5 [IUT >> TS_1] (*If* sd ≠ scP) Slot type modification to scP s6 [USR >> P] Pick up on P a6.1 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)> a6.2 [P <> TS_1] End to end connection s7 [TS_1 >> IUT] {CC-RELEASE} a7 [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers In a4 verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_1 In a6.2, verify that audio can be heard in both direction
Comments:	The list access session is not closed with external call initiation and continues until a6.2 In a3.3, <<SIGNAL>> IE is optional as it is not needed in case of in-band tones from the network (see TS 102 527-3 [14], clause 7.4.15.1)

TC_FT_NG1.N.16_BV_6003	LiA/Voice call interactions - LiA with first outgoing voice call initiation - external G.722 call - LiA initiated in full slot
Test purpose and body:	See test TC_FT_NG1.N.16_BV_6000(P=called phone=Phone A, S=initial LiA slot type=Fullslot)

TC_FT_NG1.N.16_BV_6006	LiA/Voice call interactions - LiA with first outgoing voice call initiation - external G.726 call - LiA initiated in long slot
Test purpose and body:	See test TC_FT_NG1.N.16_BV_6000(P=called phone=Phone C, S=initial LiA slot type=Longslot)

TC_FT_NG1.N.16_BV_6100(P,S)	LiA/Voice call interactions - LiA with first external incoming voice call - Audio (P=calling phone, S=LiA initial slot type) **(Parameterized test)**
Test purpose:	Check that FP supports PP opening LiA session with slot type S (full or long slot) whatever the default codec used by FP; then that FP correctly uses CW in order to indicate a first (pseudo-parallel) incoming call from P; and that FP initiates if needed a codec change (and slot type modification) as described in TS 102 527-3 [14], clause 7.4.10.6.2. Check ring back tone and then voice call audio
Reference:	TS 102 527-1 [13], clauses 7.3.3 and 7.3.4, TS 102 527-3 [14], clauses 7.4.10.6.3 and 7.4.15.1
Initial condition:	P = calling party (Phone A or Phone C) cP = codec required to call P (G.722 for P=Phone A, G.726 for P=Phone C) scP = slot type required by cP d = default codec used by FP sd = slot type required by codec d Missed Calls List content as in clause 4.1.1.1.2 TS_1 is NG PP1, TS_2 is NG PP2. If FT_IXIT_11, TS_2 is simultaneously accessing the same list. F-00
Time sequence:	s1.1 [TS_1 >> IUT] Connection with slot type 'S' on MAC layer s1.2 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message with: - (**optional**) IE <<CODEC LIST>> set to d (*default codec*) s2.1 [TS_1 >> IUT] (*if <<CODEC-LIST>> present and S ≠* sd) Slot type modification to sd s2.2 [TS_1 >> IUT] (*Open the Missed Calls List)* <**Start session**, list identifier = 01H, nb of sorting fields =0> a2 [IUT >> TS_1] <**Start session confirm**, session id=n, total nb=m> s3 [TS_1 >> IUT] (*Simulate continuous browsing of the Missed Calls List)* <**Read entries**, session id=n, start index=1, direction=0, counter=c, mark entries request= 7FH, list entry field identifier 1..n =01H, 02H, 03H, 04H, 05H, 06H, 07H > a3 [IUT >> TS_1] <**Read entries confirm**, session id=n> followed by <data packet/data packet last> with entry content s4 [P >> IUT] Incoming call initiation a4 [IUT >> TS_1] {**CC-CONNECT**} message with: - (*If not added before*) IE <<CODEC LIST>> set to d s5 [TS_1 >> IUT] (*If <<CODEC-LIST>> present in {CC-CONNECT} and* S ≠ sd) Slot type modification to sd a5.1 [IUT >> TS_1] (*In one or several messages*) {**CC-INFO**} message(s) with: - (*Optional*) IE <<SIGNAL>> with value 07H indicating 'Call waiting tone on' - IE <<CALLING PARTY NUMBER <P number> >> - IE <<CALL-INFORMATION>> specifying: - (call id a, **CS call setup**) =<(1, 0, value a), (2, 1, 1)> - (line 0,full VoIP line type info)=<(0, 0, 0),(0, 5, 1)> a5.2 [USR] (*If <<SIGNAL>> IE absent*) network originating in-band CW tone can be heard on TS_1. (*display for accepting CW manually*) s6 [TS_1 >> IUT] (*Pseudo call waiting acceptance*) {CC-INFO} message with: - IE <<MULTI-KEYPAD>> set to (1CH, 35H) digits - IE <<CALL-INFORMATION>> with (call id a) =<(1, 0, value a)> (*If* d ≠ cP perform a6 to a8.2) a6 [IUT >> TS_1] {**CC-SERVICE-CHANGE**} with IE <<CODEC-LIST cP>> s7 [TS_1 >> IUT] {CC-SERVICE-ACCEPT} message a7 [IUT >> TS_1] {IWU-INFO} with IE <<CODEC-LIST >> set to cP s8 [TS_1 >> IUT] {IWU-INFO} with IE <<CODEC-LIST>> set to cP a8.1 [IUT >> TS_1] (*If* sd ≠ scP) Slot type modification to scP. a8.2 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)> a8.3 [IUT <> TS_1] End to end connection

	s9 [TS_1 >> IUT] {CC-RELEASE} a9 [IUT >> TS_1] {CC-RELEASE-COM} message
Pass criteria:	Verify all answers In a7 verify that IUT sends {IWU-INFO} without waiting for {IWU-INFO} from TS_1 In a8.3, verify that audio can be heard in both directions
Comments:	After a5.1, IUT could send additional instances of IE signal (see TS 102 527-3 [14], clause 7.4.15.2.1) After s6 (incoming call acceptance), the tester keeps the LiA session open Missed Calls List browsing initiated in s2.2 continues until a8.3

TC_FT_NG1.N.16_BV_6103	LiA/Voice call interactions - LiA with first incoming voice call - external G.722 call - LiA initiated in full slot
Test purpose and body:	See test TC_FT_NG1.N.16_BV_6100(P=calling phone=Phone A, S=initial LiA slot type=Fullslot)

TC_FT_NG1.N.16_BV_6106	LiA/Voice call interactions - LiA with first incoming voice call - external G.726 call - LiA initiated in long slot
Test purpose and body:	See test TC_FT_NG1.N.16_BV_6100(P=calling phone=Phone C, S=initial LiA slot type=Longslot)

TC_FT_NG1.N.16_BV_7401	SMS Settings List - enabling and disabling of SMS services	
Test purpose:	Test that the FP sets or resets the Enable SMS field in the SMS Settings List correctly	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in4.1.1.2.5 SMS Settings List. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = SMS Settings List, session id=A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field identifier 1 = 'Enable SMS'>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, start index = 1, direction = 0, counter = 2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'Enable SMS', Entry field 1 content = 0> <Entry id for 2nd Entry = F, Entry field id 1 = 'Enable SMS', Entry field 1 content = 1> >
		Enable SMS for the 1st SMS service
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = E>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = E>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = E, Entry field 1 of 'Enable SMS' set to 1>
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1 - modification, entry id = E, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,1)
		Disable SMS for the 2nd SMS service
	s6 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a6 [IUT >> TS_1]	<**Edit entry confirm**>
	s7.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s7.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = F, Entry field 1 of 'Enable SMS' set to 0>
	a7.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a7.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1 - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		Verify that the changes have been done
	s8 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field identifier 1 = 'Enable SMS'>
	a8.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a8.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A,

		with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'Enable SMS', Entry field 1 content = 1> <Entry id for 2nd Entry = F, Entry field id 1 = 'Enable SMS', Entry field 1 content = 0> >
	s9 [TS_1 >> IUT] a9 [IUT >> TS_1]	<**End session**, session id = A> <**End session confirm**, session id = A>
	s10 [TS_1 >> IUT] a10 [IUT >> TS_1]	{**CC-RELEASE**} message {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:		

TC_FT_NG1.N.16_BV_7402	SMS Settings List - change SMSC Send Server	
Test purpose:	Test that the FP changes the SMSC Send Server field in the SMS Settings List correctly	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id=SMS Settings List session id=A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='SMSC Send Server '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**Data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMSC Send Server', Entry field content = 0123456789> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMSC Send Server', Entry field content = 0987654321> >
		Change the SMSC Send Server number for the 2nd SMS service
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s5.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMSC Send Server' set to 0387699989 >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE << **List change details** >> with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='SMSC Send Server'>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**Data packet/data packet last**, session id = A >, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMSC Send Server', Entry field content = 0123456789> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMSC Send Server', Entry field content = 0387699989 >
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:		

TC_FT_NG1.N.16_BV_7403	SMS Settings List - change SMSC Receive Server	
Test purpose:	Test that the FP changes the SMSC Receive Server field in the SMS Settings List correctly	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id=SMS Settings List, session id=A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='SMSC Receive Server '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMSC Receive Server', Entry field content = 0123456788> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMSC Receive Server', Entry field content = 0987654321> >
		Change the SMSC Receive Server number for the 2nd SMS service
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id=A, entry id=F, Entry field id 1 of 'SMSC Receive Server' set to 0387699988 >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id=A, entry id=F>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field id 1='SMSC Receive Server'>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id=A, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMSC Receive Server', Entry field content = 0123456789> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMSC Receive Server', Entry field content = 0387699988 > >
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:		

TC_FT_NG1.N.16_BV_7404	SMS Settings List - change Max SMS size	
Test purpose:	Test that the FP changes the Max SMS size field in the SMS Settings List correctly	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id=SMS Settings List, session id=A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='Max SMS size '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'Max SMS size', Entry field content = 140> <Entry id for 2nd Entry = F, Entry field id 1 = 'Max SMS size', Entry field content = 1024> >
		Change the maximum SMS size for the 1st SMS service to 256
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = E>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = E>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Max SMS size' set to 256 >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with:: - IE <<**List change details**>> with: - originating PP = TS_1, - modification, entry id = E, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,1)
		Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='Max SMS size '>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'Max SMS size', Entry field content = 256> <Entry id for 2nd Entry = F, Entry field id 1 = 'Max SMS size', Entry field content = 1024> >
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:		

TC_FT_NG1.N.16_BV_7405	SMS Settings List - change Line id	
Test purpose:	Test that the FP changes the Line id field in the SMS Settings List correctly: 1- Read the initial line id values 2- Change the value of the Line id for the 2nd entry to have value 2 3- Verify that the change has been done 4- Put back the original value for Line id (2nd entry)	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00 Three lines are available.	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id=SMS Settings List session id=A>
		1- Read the initial line id values
	s3 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='Line id '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A >, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1='Line id', Entry field 1 content=0> <Entry id for 2nd Entry = F, Entry field id 1='Line id', Entry field 1 content=1>
		2- Change the value of the Line id for the 2nd entry to have value 2
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'Line id' set to 2 >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<Events notification>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		3- Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='Line id'>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A >, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1='Line id', Entry field 1 content=1> <Entry id for 2nd Entry = F, Entry field id 1='Line id', Entry field 1 content=2>
		4- Put back the original value for Line id (2nd entry)
	s7 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a7 [IUT >> TS_1]	<**Edit entry confirm**>
	s8.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s8.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = F,

		Entry field identifier 1 of 'Line id' set to 1 >
	a8.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a8.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE<<**List change details**>> with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
	s9 [TS_1 >> IUT]	<**End session**, session id = A>
	a9 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s10 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a10 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:		

TC_FT_NG1.N.16_BV_7406	SMS Settings List - change SMS delivery report	
Test purpose:	Test that the FP changes the SMS delivery report field in the SMS Settings List correctly 1- Read the initial 'SMS delivery report' values 2- Change the value of the SMS delivery report for the 2nd entry to have value 30H 3- Verify that the change has been done	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id=SMS Settings List, session id=A>
		1- Read the initial 'SMS delivery report' values
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field identifier 1 = 'SMS delivery report '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMS delivery report', Entry content = 30H> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMS delivery report', Entry content = 31H> >
		2- Change the value of the SMS delivery report for the 2nd entry to have value 30H
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMS delivery report' set to 30H >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> IE with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/SMS Settings List' - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		3- Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1 = 'SMS delivery report '>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMS delivery report', Entry field content = 31H> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMS delivery report', Entry field content = 30H> >
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	

Comments:	

TC_FT_NG1.N.16_BV_7407	SMS Settings List - change SMS validity period	
Test purpose:	Test that the FP changes the SMS validity period field in the SMS Settings List correctly: 1- Read the initial 'SMS validity period' values 2- Change the value of the SMS validity period for the 2nd entry to five minutes 3- Verify that the change has been done	
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1	
Initial condition:	1 PP registered (TS_1) that supports the Extended list change indication The SMS Settings List has two entries as shown in clause 4.1.1.2.5. IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = SMS Settings List, session id = A>
		1- Read the initial 'SMS validity period' values
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field identifier 1 = 'SMS validity period '>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a3.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A, with for each entry (i.e. each SMS service) the value as shown in the initial condition as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMS validity period', Entry field content = 167> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMS validity period', Entry field content = 255> >
		2- Change the value of the SMS validity period for the 2nd entry to five minutes
	s4 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = F>
	a4 [IUT >> TS_1]	<**Edit entry confirm**>
	s5.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMS validity period' set to 5 >
	a5.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - modification, entry id = F, position indicator=E - IE <<**Events notification**>> with: - event multiplicity=2 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,2)
		3- Verify that the change has been done
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0 (forward), counter=2, List entry field identifier 1='SMS validity period '>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, direction=0, counter=2>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = A >, with for each entry (i.e. each SMS service) the value, as follows: <Entry id for 1st Entry = E, Entry field id 1 = 'SMS validity period', Entry field content = 167> <Entry id for 2nd Entry = F, Entry field id 1 = 'SMS validity period', Entry field content = 5>
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message

Pass criteria:	Verify all answers.
Comments:	

TC_FT_NG1.N.16_BV_8001	{CC-SETUP} crossing - incoming call from IUT - crossing LiA service call - incoming call restarted from IUT		
Test purpose:	Test the FT behaviour when: 1- IUT (FT) starts an incoming voice call (initiated from Phone A) 2- Tester (PT) immediately answers with a crossing LiA service call 3- Abnormal release of both calls 4- IUT (FT) restarts incoming call within timeout P-<CC.06>, because incoming call attempt from Phone A continues		
Reference: Initial condition: Time sequence:	EN 300 175-5 [5], clause 9.5.2.3 F-00		1- IUT (FT) starts an incoming voice call (initiated from Phone A)
	s1	[USR >> PhA]	Initiate incoming voice call from Phone A on line 0
	a1	[IUT >> TS_1]	{**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - (optional) <<CALLING PARTY NUMBER>> with data1 - (optional) <<CALLING PARTY NAME>> with data2 - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2	[TS_1 >> IUT]	2- Tester (PT) immediately answers with a crossing LiA service call: {**CC-SETUP**} with: - <<TRANSACTION IDENTIFIER flag=0, value=3>> - <<BASIC-SERVICE **LiA**>> Start timer P-<CC.06>
			3- Abnormal release of both calls
	a2	[IUT >> TS_1]	{**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=3>> - <<RELEASE-REASON code='Insufficient resources'>>
	s3	[TS_1 >> IUT]	{**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1>> - <<RELEASE-REASON code='Insufficient resources'>>
			4- IUT (FT) restarts the incoming call within timeout P-<CC.06>
	a3	[IUT >> TS_1]	(*Within timer CC.06*) {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - (if present in a1) <<CALLING PARTY NUMBER>> with data1 - (if present in a1) <<CALLING PARTY NAME>> with data2 - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s4.1	[TS_1 >> IUT]	{**CC-ALERTING**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	s4.2	[TS_1 >> IUT]	{**CC-CONNECT**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	a4.1	[IUT >> TS_1]	{**CC-CONNECT-ACK**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)>
	a4.2	[IUT >> TS_1]	{**CC-INFO**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)>
	a4.3	[IUT <> TS_1]	End-to-end U-plane connection

	s5	[USR >> Ph A]	Hang up
	a5	[IUT >> TS_1]	{**CC-RELEASE**} message - <<TRANSACTION IDENTIFIER flag=0, value= tv1'>>
	s6	[TS_1 >> IUT]	{**CC-RELEASE-COM**} message - <<TRANSACTION IDENTIFIER flag=1, value= tv1'>>
	a6		End of the test
Pass criteria:	Verify all answers In a3 verify that CLIP and CNIP are received if received in a1, and that the received parameters (collectively named data1 and data2, if present) have the same value as in a1		
Comments:	In a3, when IUT restarts incoming call, it may use a transaction value tv1' different from the transaction value used when the incoming call was first started		

TC_FT_NG1.N.16_BV_8005	{**CC-CONNECT**}/{**CC-RELEASE**} crossing - LiA service call from tester - crossing incoming call from IUT - incoming call restarted
Test purpose:	Test FT behaviour when: 1- Tester (PT) starts an LiA service call (outgoing call) and reads some entries 2- IUT (FT) starts an incoming voice call (initiated from Phone A) 3- Tester (PT) immediately releases LiA service call (crossing) 4- IUT restarts the incoming call because incoming call attempt from Phone A continues
Reference:	TS 102 527-3 [14], clause 7.4.10.6.3, subsection 'Crossing with LiA service call release from PP side'
Initial condition:	One PP is registered to the FP. IUT is NG PP1, TS_1 is NG FP. NG PP1 is attached to line 0 only Contact list as defined in clause 4.1.1.1.6 with additional contact set 1 (25 entries) F-00
Time sequence:	1- Tester (PT) starts an LiA service call (outgoing call) and reads some entries s1 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = 05H, nb of sorting fields =0> a2 [IUT >> TS_1] <**Start session confirm**, session id=s, total nb=25, discriminator type = 0 or 1, nb of sorting fields = 1 or 2, sorting field id1 =1, sorting field id2 =2 in case of 2 sorting fields > s3 [TS_1 >> IUT] <**Read entries**, session id=s, start index=1, direction=0 (forward), counter=03H, mark entries request= 00H, list entry field id 1..n =01H, 02H, 03H, 03H, 04H, 05H > a3 [IUT >> TS_1] <**Read entries confirm**, session id=s, start index=1, counter=3> followed by <data packet/data packet last> with requested entries and entry fields. 2- IUT (FT) starts an incoming voice call (initiated from Phone A) s4 [USR >> IUT] Incoming call initiated from Phone A on line 0 a4 [IUT >> TS_1] (*in order to present incoming call*) {**CC-CONNECT**} message 3- Tester (PT) immediately releases LiA service call (crossing) s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5.1 [IUT >> TS_1] {**CC-RELEASE-COM**} message 4- IUT restarts incoming call because incoming call attempt from Phone A continues a5.2 [IUT >> TS_1] {**CC-SETUP**} message with: - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, **CS call setup**) =<(0, 0, lid0), (0, 5, lt0), (1, 0, 1), (2, 1, 1)> s6.1 [TS_1 >> IUT] {**CC-ALERTING**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> s6.2 [TS_1 >> IUT] {**CC-CONNECT**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a6.1 [IUT >> TS_1] {**CC-CONNECT-ACK**} message with: - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a6.2 [IUT >> TS_1] {**CC-INFO**} message with: - <<CALL-INFORMATION>> specifying: (call id a, **CS call connect**)=<(1, 0, value a), (2, 1, 5)> a6.3 [IUT <> TS_1] End-to-end U-plane connection s7 [TS_1 >> IUT] {**CC-RELEASE**} message a7 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	- Verify all answers

Comments:	

7.17 TC_FT_NG1.N.17 Calling line identity restriction tests cases

Clause 7.17 of TS 102 841 [16] shall apply.

7.18 TC_FT_NG1.N.18 Call forwarding (external calls) tests cases

Clause 7.18 of TS 102 841 [16] shall apply.

7.19 TC_FT_NG1.N.19 DTMF handling tests cases

Clause 7.19 of TS 102 841 [16] shall apply.

7.20 TC_FT_NG1.N.20 Tones provision tests cases

Clause 7.20 of TS 102 841 [16] shall apply.

7.21 TC_FT_NG1.N.21 Headset management tests cases

Clause 7.21 of TS 102 841 [16] shall apply.

7.22 TC_FT_NG1.N.22 Handling of lines where second calls are signalled in-band tests cases

Clause 7.22 of TS 102 841 [16] shall apply.

7.23 TC_FT_GAP.N.30 Calling Line Identification Presentation tests cases

Clause 7.23 of TS 102 841 [16] shall apply.

7.24 TC_FT_GAP.N.31 Internal call tests cases

Clause 7.24 of TS 102 841 [16] shall apply.

7.25 TC_FT_GAP.N.34 Calling Name Identification Presentation tests cases

In addition to clause 7.25 of TS 102 841 [16] the following test cases shall apply.

TC_FT_GAP.N.34_BV_3301	No use of empty CNIP over the air (absent CNIP instead)	
Test purpose:	Check that if no CNIP is received from the network, and there is no Contact List matching for the received CLIP, then no CNIP at all is sent to the PP	
Reference:	TS 102 527-5 [15], clause 7.4.33	
Initial condition:	1 PP registered (TS_1 is NG PP1) PP1 attached to line 0; Phone A on line 0 always sends only CLIP to IUT. Phone A CLIP is absent from the Contact List number fields. F-00	
Time sequence:	s1 [PhA >> IUT]	Incoming call initiation on line 0
	a1.1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> with **NO** IE <<CALLING PARTY NAME>>
	a1.2 [IUT >> TS_1]	(**for all sent {CC-INFO}**) {CC-INFO} message with **NO** IE <<CALLING PARTY NAME>>
	s2 [USR >> PhA]	Hang up
	a2 [IUT >> TS_1]	{**CC-RELEASE**} message
	s3 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	-	

TC_FT_GAP.N.34_BV_3302	Contact number matching on a first incoming call	
Test purpose:	Check that contact number matching works on the tested FP if a CLIP is received from the network.	
Reference:	TS 102 527-5 [15], clause 7.4.33	
Initial condition:	1 PP registered (TS_1 is NG PP1) PP1 attached to line 0; Phone A on line 0 always sends only CLIP to IUT. Phone A CLIP is absent from the Contact List number fields (added in s1.1). F-00	
Time sequence:	s1.1 [IUT]	Add Phone A phone number in a new Contact List entry, with name0 in the name field.
	s1.2 [PhA >> IUT]	Incoming call initiation on line 0
	a1.1 [IUT >> TS_1]	{**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> and possibly IE <<CALLING PARTY NAME =< Presentation indicator=Presentation allowed, Used alphabet= DECT standard or UTF-8, Screening indicator=User provided, verified and passed, Calling party name = name0> >>
	a1.2 [IUT >> TS_1]	(**if CNIP absent in a1.1**) {**CC-INFO**} message with IE <<CALLING PARTY NAME>> with <Calling party name> = name0
	s2 [USR >> PhA]	Hang up
	a3 [IUT >> TS_1]	{**CC-RELEASE**} message
	s3 [TS_1 >> IUT]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	- Contact List populating in s1.1 can be done either manually or automatically with a list access from the tester.	

7.26 TC_FT_GAP.N.35 Enhanced security tests cases

In addition to clause 7.26 of TS 102 841 [16] the following test cases shall apply.

TC_FT_GAP.N.35_GC_101	Verify that FT enables encryption for incoming call within timer < MM_encryption_check.1 > in case an NG DECT Part 3 PP is registered		
Test purpose:	-		
Reference:	EN 300 444 [12], clause 8.45.1		
Initial condition:	TS_1 is a NG DECT Part 3 PP TS_1 does **not** indicate the 'Support of "Re-keying" and "default cipher key mechanism early encryption" ' (bit 5 in the profile_indicator_7) nor the "Support of NG DECT Part 5" (bit 7 in the profile_indicator_7) in the Terminal capability. TS_1 indicates the support of 'Support of NG DECT Part 3' (bit 3 in the profile_indicator_7) and the support of 'NG DECT Part 1' (bit 2 in the profile_indicator_7) in the Terminal capability. IUT in F-00		
Time sequence:	s1.1	[USR >> IUT]	Start registration procedure
	s1.2.	[TS_1 >> IUT]	{**ACCESS-RIGHTS-REQUEST**} message containing a <<Terminal Capability>> IE with the settings as indicated in the initial condition
	a1.	[IUT >> TS_1]	{**ACCESS-RIGHTS-ACCEPT**} message
	s2.	[USR >> PH A]	Perform an incoming call from Phone A
	a2.	[IUT >> TS_1]	{**CC-SETUP**} message
	s3.	[TS_1 >> IUT]	{**CC-ALERTING**} message. Start timer T001 (MM_encryption_ check.1 + 10 %)
	a3.	[IUT >> TS_1]	{**AUTHENTICATION-REQUEST**} message before timer T001 expires
	s4.	[TS_1 >> IUT]	{**AUTHENTICATION-REPLY**} message
	a4.	[IUT >> TS_1]	{**CIPHER_REQUEST**} message before timer T001 expires.
	s5.1	[TS_1 >> IUT]	Activate encryption on MAC layer
	s5.2	[TS_1 >> IUT]	{**CC-CONNECT**} message
	a5.1	[IUT >> TS_1]	{**CC-CONNECT-ACK**} message
	a5.2.	[IUT]	Verify that encryption is activated before timer T001 expires. Verify end-to-end U-plane connection between TS_1 and Phone A.
	s6.	[USR]	Wait 66 seconds (<MM_re-keying.1> +10 %).
	a6.	[IUT]	Verify that encryption is still activated and verify end-to-end U-plane connection between TS_1 and Phone A.
Pass criteria:	Verify all answers		

TC_FT_GAP.N.35_GC_102	Verify that FT enables encryption for outgoing call within timer < MM_encryption_ check.1 > in case an NG DECT Part 3 PP is registered
Test purpose:	-
Reference:	EN 300 444 [12], clause 8.45.1
Initial condition:	TS_1 is a NG DECT Part 3 PP TS_1 does **not** indicate the 'Support of "Re-keying" and "default cipher key mechanism early encryption" ' (bit 5 in the profile_indicator_7) nor the "Support of NG DECT Part 5" (bit 7 in the profile_indicator_7) in the Terminal capability. TS_1 indicates the support of 'Support of NG DECT Part 3' (bit 3 in the profile_indicator_7) and the support of 'NG DECT Part 1' (bit 2 in the profile_indicator_7) in the Terminal capability. IUT in F-00
Time sequence:	s1.1 [USR >> IUT] Start registration procedure s1.2 [TS_1 >> IUT] {**ACCESS-RIGHTS-REQUEST**} message containing a <<Terminal Capability>> IE with the settings as indicated in the initial condition a1 [IUT >> TS_1] {**ACCESS-RIGHTS-ACCEPT**} message s2 [TS_1 >> IUT] {**CC-SETUP**} to IUT and start timer T001 (MM_encryption_check.1 + 10 %) a2.1 [IUT >> TS_1] CC-message (either {**CC-SETUP-ACK**}, {**CC-ALERTING**}, {**CC-CALL-PROC**}, or {**CC-CONNECT**}) a2.2 [IUT >> TS_1] {**AUTHENTICATION-REQUEST**} message before timer T001 expires s3 [TS_1 >> IUT] {**AUTHENTICATION-REPLY**} message a3 [IUT >> TS_1] {**CIPHER_REQUEST**} message before timer T001 expires s4.1 [TS_1 >> IUT] Activate encryption on MAC layer s4.2 [TS_1 >> IUT] {**CC-INFO**} message with IE << MULTI-KEYPAD >> set to (Phone A number) digits s4.3. [USR >> PH A] Answer call on Phone A a4.1 [IUT >> TS_1] Either {**CC-INFO**} or {**CC-CONNECT**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> a4.2 [IUT] Verify that encryption was activated before timer T001 expires. Verify end-to-end U-plane connection between TS_1 and Phone A. s5 [USR] Wait 66 seconds (<MM_re-keying.1> +10 %). a5 [IUT] Verify that encryption is still activated and verify end-to-end U-plane connection between TS_1 and Phone A.
Pass criteria:	Verify all answers The IUT may send the MM messages of answers a2.2. and a3. before or after sending the CC message of answer a2.1.

7.27 TC_FT_NG1.A.1 Easy PIN code registration tests cases

Clause 7.27 of TS 102 841 [16] shall apply.

7.28 TC_FT_NG1.A.2 Easy pairing registration tests cases

Clause 7.28 of TS 102 841 [16] shall apply.

7.29 TC_FT_NG1.A.3 Handset locator tests cases

Clause 7.29 of TS 102 841 [16] shall apply.

7.30 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.31 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.32 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.33 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.34 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.35 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.36 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.37 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.38 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.39 Void

Descriptions of new fixed part tests specific to NG DECT Part 5 start at clause 7.40. This leaves room for tests of features and procedures that may be designed in the future but which are not specific to Part 5. That is, the tests for new features that will apply to both Part 3 and Part 5, because they are considered important to both parts, will not be interleaved but will be in contiguous subclauses.

7.40 TC_FT_GAP.N.1 Outgoing call

The following test cases shall apply. They are summarized in Table 3.

Table 19: Summary of contact number matching test cases on FT side

Side	Call rank	Implementation	Use Case (note 1)	TC number
FT	First call	Early {CC-CONNECT}	1	(if FT_IXIT_22=early) TC_FT_GAP.N.1_BV_102
FT	First call	Non-early {CC-CONNECT}	1	(FT_IXIT_22=non-early) TC_FT_GAP.N.1_BV_101
FT	2nd call	NA	1	NOT TESTED
FT	First call	Early {CC-CONNECT}	2	NOT TESTED (note 2)
FT	First call	Non-early {CC-CONNECT}	2	NOT TESTED (note 2)
FT	2nd call	NA	2	NOT TESTED (note 2)
FT	First call	Early {CC-CONNECT}	1,2	NOT TESTED (note 2)
FT	First call	Non-early {CC-CONNECT}	1,2	NOT TESTED (note 2)
FT	2nd call	NA	1,2	NOT TESTED (note 2)
NOTE 1: Use cases 1 and 2 are described in clause 7.4.32 and correspond to 'Contact List matching' and 'contact provision by network' respectively. NOTE 2: Use case 2 (forwarded-to tel number and name notified by the network and then to the PP by the FP) is not tested on FP side because the network is involved.				

TC_FT_GAP.N.1_BV_101	Contact number matching in a first external outgoing call (non early CC-CONNECT implementation)	
Test purpose:	Test that the FP finds the contact matching by placing a first external outgoing call on line 0 towards number 0490413002 which is present in the Contact List. Test used if FP declares non-early CC-CONNECT implementation (FT_IXIT_22)	
Reference:	TS 102 527-5 [15], clause 7.4.32	
Initial condition:	T-00; Contact List content on IUT as defined in clause 4.1.1.1.6 for PT test platform.	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IEs <<BASIC-SERVICE>> 'Normal call setup', and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)>
	a1 [IUT >> TS_1]	{**CC-SETUP-ACK**} message with IE <<CALL-INFORMATION>> specifying at a minimum (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> and possibly (line 0, full VoIP line type information) =<(0, 0, 0), (0, 5, 1)>
	s2 [TS_1 >> IUT]	{**CC-INFO**} message with IEs <<MULTI-KEYPAD>> set to "0490413002" digits and <<CALL-INFORMATION>> set to (call id a) =<(1, 0, value a)>
	a2.1 [IUT >> TS_1]	(**optional**) {**CC-CALL-PROC**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call proc) =<(1, 0, value a), (2, 1, 3)> and possibly (*first possible position*) IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'User provided', <Called party name> = 'FENJIRO' and <Called party firstname> = 'Carlos'. followed by {**CC-CONNECT**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a2.2 [TS_1 <> IUT]	End-to-end U-plane connection
	s3 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a3 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers IE <<CALLED PARTY NAME>> shall be sent either with CS call proc or CS call connect in a2.1, or in an additional {CC-INFO} message following CS call proc call status (before or after CS call connect).	
Comments:	The FP line confirmation is not tested here, but may appear in a1 (first possible position)	

TC_FT_GAP.N.1_BV_102	Contact List matching in a first external outgoing call (early CC-CONNECT implementation)	
Test purpose:	Test that the FP finds the contact matching by placing a first external outgoing call on line 0 towards number 0490413002 which is present in the Contact List. Test used if FP declares early CC-CONNECT implementation (FT_IXIT_22).	
Reference:	TS 102 527-5 [15], clause 7.4.32	
Initial condition:	T-00; Contact List content on IUT as defined in clause 4.1.1.1.6 for PT test platform.	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IEs <<BASIC-SERVICE>> 'Normal call setup', and <<CALL-INFORMATION>> specifying (line 0) =<(0, 0, 0)>
	a1 [IUT >> TS_1]	{**CC-CONNECT**} message with IE <<CALL-INFORMATION>> specifying at least (call id a) =<(1, 0, value a)> followed by a {CC-INFO} message specifying at least (call id a, CS call setup ack) =<(1, 0, value a), (2, 1, 2)> - one of the two previous messages {CC CONNECT} or {CC-INFO} possibly specifying (line 0, full VoIP line type information) =<(0, 0, 0), (0, 5, 1)> in the <<CALL INFORMATION>> IE
	s2 [TS_1 >> IUT]	{**CC-INFO**} message with IEs <<MULTI-KEYPAD>> set to "0490413002" digits and <<CALL-INFORMATION>> set to (call id a) =<(1, 0, value a)>
	a2.1 [IUT >> TS_1]	(**optional**), {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call proc) =<(1, 0, value a), (2, 1, 3)> and possibly (*first possible position*) IE <<CALLED PARTY NAME>> with <Used Alphabet>=UTF-8, <Screening indicator> = 'User provided', <Called party name> = 'FENJIRO' and <Called party firstname> = 'Carlos'. followed by {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a2.2 [TS_1 <> IUT]	End-to-end U-plane connection
	s3 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a3 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers IE <<CALLED PARTY NAME>> shall be sent with CS call proc or CS call connect in a2, or in an additional {CC-INFO} message following CS call proc call status (before or after CS call connect).	
Comments:	The FP line confirmation is not tested here, but may appear in a1 (first possible position)	

7.41 TC_FT_GAP.N.8 Incoming call

TC_FT_GAP.N.8_BV_101	{**CC-SETUP**} crossing management - incoming call from IUT - crossing voice call - incoming call restarted from IUT
Test purpose:	Test the FT behaviour when: 1- IUT (FT) starts an incoming voice call (initiated from Phone A) 2- Tester (PT) immediately answers with a crossing outgoing voice call 3- Abnormal release of both calls 4- IUT (FT) restarts incoming call within timeout P-<CC.06>, because incoming call attempt from Phone A continues.
Reference:	EN 300 175-5 [5], clauses 9.5.2.3
Initial condition:	F-00
Time sequence:	1- IUT (FT) starts an incoming voice call (initiated from Phone A) s1 [USR >> PhA] Initiate incoming voice call from Phone A on line 0 a1 [IUT >> TS_1] {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> s2 [TS_1 >> IUT] 2- Tester (PT) immediately answers with a crossing outgoing voice call: {**CC-SETUP**} with: - <<TRANSACTION IDENTIFIER flag=0, value=3>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > Start timer P-<CC.06> 3- Abnormal release of both calls a2 [IUT >> TS_1] {**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=3>> - <<RELEASE-REASON code='Insufficient resources'>> s3 [TS_1 >> IUT] {**CC-RELEASE-COM**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1>> - <<RELEASE-REASON code='Insufficient resources'>> 4- IUT (FT) restarts the incoming call within timeout P-<CC.06> a3 [IUT >> TS_1] (*Within timer CC.06*) {**CC-SETUP**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - <<CALL-INFORMATION>> specifying: (line 0, line type info, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> s4.1 [TS_1 >> IUT] {**CC-ALERTING**} message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> s4.2 [TS_1 >> IUT] {**CC-CONNECT}** message with: - <<TRANSACTION IDENTIFIER flag=1, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a4.1 [IUT >> TS_1] {**CC-CONNECT-ACK**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a)=<(1, 0, value a)> a4.2 [IUT >> TS_1] {**CC-INFO**} message with: - <<TRANSACTION IDENTIFIER flag=0, value=tv1'>> - <<CALL-INFORMATION>> specifying: (call id a, CS call connect)=<(1, 0, value a), (2, 1, 5)> a4.3 [IUT <> TS_1] End-to-end U-plane connection s5 [USR >> Ph A] Hang up a5 [IUT >> TS_1] {**CC-RELEASE**} message - <<TRANSACTION IDENTIFIER flag=0, value= tv1'>> s6 [TS_1 >> IUT] {**CC-RELEASE-COM**} message - <<TRANSACTION IDENTIFIER flag=1, value= tv1'>> a6 End of the test
Pass criteria:	Verify all answers
Comments:	In a3, when IUT restarts incoming call, it may use a transaction value tv1' different from the transaction value used when the incoming call was first started

7.42 TC_FT_NG1.N.23 Line and Diagnostic Test Cases

NOTE 1: Test steps are supposed to occur as separated in time as needed so that {FACILITY} messages for different events are not aggregated.

NOTE 2: "<<BASIC SERVICE **LiA**>> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE Call class = LiA service setup, Basic service = Wideband speech default setup attributes".

TC_FT_NG1.N.23_BV_101	Line related indication - line use & handset use statuses have changed (single call mode)	
Test purpose:	Check that the line use and handset use statuses are indicated correctly 1- Handset and line are idle 2- Perform an incoming call on line 0 to IUT from Phone A and hang up from PP 3- Handset and line are again idle	
Reference:	TS 102 527-5 [15], clause 7.4.34.1	
Initial condition:	One PP registered (TS_1 is NG PP1, IUT is NG FP) NG PP1 as handset 1 attached to line 0 in state T-00 Line 0 is up with "Multiple calls mode" set to 30H 'single call mode'	
Time sequence:		1- Handset and line are idle
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, List id = Line and Diagnostic Statuses List>
	a2 [IUT >> TS_1]	<**Start session confirm**, List id=0aH, session id=A, total number=n, discriminator type=dt>
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index=1, direction=0, counter=2, mark entries req.=00H, field ids=01H 03H 04H>
	a3 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, counter=2>, followed by <**data packet/data packet last>** with (at least): - Line id=0, **Line use status = Line is idle**, Handset use status = (nb=0, bitmap = 00000000B)
	s4 [USR >> Ph A]	2- Perform an incoming call on line 0 to IUT from Phone A
	a4.1 [IUT >> TS_1]	{**CC-CONNECT**}
	a4.2 [IUT >> TS_1]	(*pseudo call waiting*) {**CC-INFO**} with: - (optional) <<SIGNALvalue='call waiting tone'>> - <<CALLING PARTY NUMBER>> with 'calling number' - << CALL-INFORMATION>> with (line 0, call id a, CS call setup)= =<(0, 0, lid0), (1, 0, value a), (2, 1, 1)>
	s5 [TS_1 >> IUT]	(*call waiting acceptance*) {**CC-INFO**} message with: - <<MULTI-KEYPAD info= 1C35H>> - <<CALL INFORMATION>> with (call id a)=<(1,0,value a)>
	a5.1 [IUT >> TS_1]	{**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)>
	a5.2 [IUT >> TS_1]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subt. = **Line use ind./line or system is busy (02H),** - event multiplicity = Line 0 (00H) - event type/subtype = Handset use status indication/0, - event multiplicity = Line 0 (00H)
	s6 [TS_1 >> IUT]	<**Read entries**, session id=A, start index=1, direction=0, counter=2, mark entries req.=00H, field ids=01H 03H 04H>
	a6 [IUT >> TS_1]	<**Read entries confirm**, session id=A, start index=1, counter=2>, followed by <d**ata packet/data packet last**> with (at least): - **Line id= 0**, **Line use status=Line or system is busy (02H)**, Handset use status=(nb=1, bitmap=00000001B).
	s7 [TS_1 >> IUT]	<**End session**, session id=A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id=A>
	s8 [TS_1 >> IUT]	(*NG PP1 hangs up*) {**CC-RELEASE**}
	a8.1 [IUT >> TS_1]	{**CC-RELEASE-COM**}
	a8.2 [IUT >> TS_1]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = **Line use ind./Line is idle (00H),** - event multiplicity = Line 0 (00H) - event type/subtype = Handset use status indication/0,

			- event multiplicity = Line 0 (00H) 3- Handset and line are again idle
	s9	[TS_1 >> IUT]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	a9	[IUT >> TS_1]	{**CC-CALL-PROC**} message
	s10	[TS_1 >> IUT]	<**Start session**, List id = Line and Diagnostic Statuses List >
	a10	[IUT >> TS_1]	<**Start session confirm**, List id = 0aH, session id=B, total number=n, discriminator type=dt>
	s11	[TS_1 >> IUT]	<**Read entries**, session id=B, start index=1, direction=0, counter=2, mark entries req. = 00H, field ids = 01H 03H 04H>
	a11	[IUT >> TS_1]	<**Read entries confirm**, session id = B, start index=1, counter=2>, followed by <**data packet/data packet last>** with: - Line id=0, **Line use status = Line is idle (00H)**, Handset use status=(nb=0, bitmap = 00000000B)
	s12	[TS_1 >> IUT]	<**End session**, session id=B>
	a12	[IUT >> TS_1]	<**End session confirm**, session id=B>
	s13	[TS_1 >> IUT]	{**CC-RELEASE**}
	a13	[IUT >> TS_1]	{**CC-RELEASE-COM**}
Pass criteria:	Verify all answers. There shall be no list change notifications about the Line and Diagnostic Statuses List.		
Comments:	The IUT should send both indications (line use, handset use) relating to the same event in the same {FACILITY} message, by may however send them separately.		

TC_FT_NG1.N.23_BV_102	Line related indication - line and handset use statuses have changed (single call mode, multiple lines)
Test purpose:	Check that the line and handset use are indicated correctly in a multiple line context 1- Line 0 idle, Line 1 in use (by PP2) 2- Perform an incoming call on line 0 to IUT from Phone A; answer from PP1 3- PP1 and PP2 hang up
Reference:	TS 102 527-5 [15], clause 7.4.34.1
Initial condition:	2 PPs registered (TS_1 is NG PP1, TS_2 is NG PP2), IUT is NG FP NG PP1 attached to line 0 in state T-00 NG PP2 attached to line 0 and line 1, involved in an external call on line 1 Line 0 is up with "Multiple calls mode" set to 30H 'single call mode' Line 1 is up with "Multiple calls mode" set to 30H 'single call mode'
Time sequence:	1- Line 0 idle, Line 1 in use (by PP2) s1 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List, number of sorting fields=0> a2 [IUT >> TS_1] <**Start session confirm**, List id = 0aH, session id=A, total number=n, discriminator type=dt> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index=1, direction=0, counter=3, mark entries req.=00H, field ids=01H 03H 04H> a3 [IUT >> TS_1] <**Read entries confirm**, session id=A, start index=1, counter=3>, followed by <**data packet/data packet last>** with (at least): - **Line id = 0**, Line use status = **Line is idle (00H)**, Handset use status = (nb=0, bitmap = 00000000B) - **Line id = 1**, Line use status = **Line or system is busy (02H)**, Handset use status = (nb= 1, bitmap = 00000010B) s4 [USR >> IUT] 2- Perform an incoming call on line 0 to IUT from Phone A a4.1 [IUT >> TS_1] {**CC-CONNECT**} a4.2 [IUT >> TS_1] (*pseudo call waiting*) {**CC-INFO**} with: - (optional) <<SIGNALvalue='call waiting tone'>> - <<CALLING PARTY NUMBER>> with 'calling number' - << CALL-INFORMATION>> with (line 0, call id a, CS call setup)= =<(0, 0, lid0), (1, 0, value a), (2, 1, 1)> s5 [TS_1 >> IUT] (*call waiting acceptance*) {**CC-INFO**} message with: - <<MULTI-KEYPAD info= 1C35H>> - <<CALL INFORMATION>> with (call id a)=<(1,0,value a)> a5.1 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> a5.2 [IUT >> TS_1,2] {**FACILITY**} message with <<Events notification>> IE with: - event type/subt. = Line use ind./**line or system is busy (02H)** **-** event multiplicity = Line 0 (00H) - event type/subtype = handset use status indication/0, - event multiplicity = Line 0 (00H) s6 [TS_1 >> IUT] <**Read entries**, session id=A, start index=1, direction=0, counter=3, mark entries req.=00H, field ids=01H 03H 04H> a6 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index=1, direction=forward, counter = 3>, followed by: <**data packet/data packet last>** with (at least): - **Line id = 0**, Line use status = **Line or system is busy (02H)**, Handset use status = (nb= 1, bitmap = 00000001B) - **Line id = 1**, Line use status = **Line or system is busy (02H)**, Handset use status = (nb= 1, bitmap = 00000010B) s7 [TS_1 >> IUT] <**End session**, session id=A> a7 [IUT >> TS_1] <**End session confirm**, session id=A> s8 [TS_1,2 >> IUT] {**CC-RELEASE**} a8 [IUT >> TS_1,2] {**CC-RELEASE-COM**}

Pass criteria:	Verify all answers. There shall be no list change notifications about the Line and Diagnostic Statuses List.
Comments:	This also tests that the Line and Diagnostic Statuses List is ordered by line id by default. The Read entries commands above may be split into one or more invocations. The IUT should send both indications (line use, handset use) relating to the same event in the same {FACILITY} message, by may however send them separately.
TC_FT_NG1.N.23_BV_103	Line related indication - line and handset use statuses have changed (multiple calls mode)
Test purpose:	Check that the line and handset use are indicated correctly. NG PP2 (TS_2) is initially involved in an external call on line 0. 1- Perform an incoming call to IUT on line 0, answered by NG PP1 (TS_1). LiA session with PP1 started. Line 0 is busy. 2- NG PP1 (TS_1) hangs up (including voice call). New LiA session with PP1 started. Line 0 is in-use. 3- NG PP2 (TS_2) hangs up (including voice call). Line 0 is idle. LiA session with PP1 continues
Reference:	TS 102 527-5 [15], clause 7.4.34.1 Two PPs registered (TS_1 is NG PP1, TS_2 is NG PP2) NG PP1 as handset 1 attached to line 0 in state T-00 NG PP2 as handset 2 attached to line 0 in an external call in F-10 (call id b) Line 0 is up with "Multiple calls mode" set to 31H 'multiple calls mode' with no more than 2 simultaneous calls allowed.
Time sequence:	s1 [USR] 1- Perform an incoming call to IUT on line 0 answered by NG PP1 a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> s2.1 [TS_1 >> IUT] {**CC-ALERTING**} message s2.2 [TS_1 >> IUT] (*1 second later*) {**CC-CONNECT**} message a2.1 [IUT >> TS_1] {**CC-CONNECT-ACK**} a2.2 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> a2.3 [IUT >> TS_1,2] {**FACILITY**} message with <<Events notification>> IE with: - event type/subt. = Line use ind./**Line or system is busy** (02H), - event multiplicity = Line 0 (00H) - event type/subtype = **Handset use status indication**/0, - event multiplicity = Line 0 (00H) s3 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List > a3 [IUT >> TS_1] <**Start session confirm**, List id=0aH, session id=A, total number=n, discriminator type=dt> s4 [TS_1 >> IUT] <**Read entries**, session id=A, start index=1, direction=0, counter=2, mark entries req.=00H, field ids=01H 03H 04H> a4 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index=1, counter=2>, followed by <d**ata packet/data packet last**> containing (at least): - Line id = 0, Line use status = **Line or system is busy (02H),** Handset use status = (nb=1, bitmap = 00000011B) s5 [TS_1 >> IUT] <**End session**, session id=A> a5 [IUT >> TS_1] <**End session confirm**, session id=A> 2- NG PP1 hangs up (including voice call) s6 [TS_1 >> IUT] {**CC-RELEASE**} a6.1 [IUT >> TS_1] {**CC-RELEASE-COM**} a6.2 [IUT >> TS_1,2] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = Line use ind./**Line is in-use (01H),** **-** event multiplicity = Line 0 (00H) - event type/subtype = Handset use status indication/0, - event multiplicity = Line 0 (00H) s7 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a7 [IUT >> TS_1] {**CC-CALL-PROC**} message s8 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List > a8 [IUT >> TS_1] <**Start session confirm**, List id = 0aH, session id = B, total number=n, discriminator type=dt>

	s9 [TS_1 >> IUT]	<**Read entries**, session id = B, start index=1, direction=0, counter=2, mark entries req.=00H, field ids = 01H 03H 04H>
	a9 [IUT >> TS_1]	<**Read entries confirm**, session id=B, start index=1, counter=2>, followed by <**data packet/data packet last**> containing (at least): - Line id = 0, Line use status = **Line is in-use (01H)**, Handset use status = (nb=1, bitmap = 00000010B)
	s10 [TS_1 >> IUT]	<**End session**, session id=B>
	a10 [IUT >> TS_1]	<**End session confirm**, session id=B>
		3- NG PP1 and NG PP2 hang up
	s11 [TS_2 >> IUT]	{**CC-RELEASE**}
	a11 [IUT >> TS_2]	{**CC-RELEASE-COM**}
	s12 [TS_1>> IUT]	{**CC-RELEASE**}
	a12 [IUT >> TS_1]	{**CC-RELEASE-COM**}
	s13 [TS_1 >> IUT]	{**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE
	a13 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s14 [TS_1 >> IUT]	<**Start session**, List id = Line and Diagnostic Statuses List >
	a14.1[IUT >> TS_1]	<**Start session confirm**, List id = 0aH, session id = C, total number=n, discriminator type=dt>
	a14.2[IUT >> TS_1,2]	{**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = Line use ind./Line is idle (00H), - event multiplicity = 0 - event type/subtype = handset use status indication/0, - event multiplicity = 0
	s15 [TS_1 >> IUT]	<**Read entries**, session id=C, start index=1, direction=0, counter=2, mark entries req.=00H, entry field ids=01H 03H 04H>
	a15 [IUT >> TS_1]	<**Read entries confirm**, session id=C, start index=1, counter=2>, followed by <**data packet/data packet last**>, containing (at least): - Line id = 0, Line use status=**Line is idle (00H)**, Handset use status = (nb=0, bitmap = 00000000B)
	s16 [TS_1 >> IUT]	<**End session**, session id=C>
	a16 [IUT >> TS_1]	<**End session confirm**, session id=C>
	s17 [TS_1 >> IUT]	{**CC-RELEASE**}
	a17 [IUT >> TS_1]	{**CC-RELEASE-COM**}
Pass criteria:	Verify all answers There shall be no list change notifications about the Line and Diagnostic Statuses List.	
Comments:	The IUT should send both indications (line use, handset use) relating to the same event in the same {FACILITY} message, but may however send them separately.	

TC_FT_NG1.N.23_BV_104	Indication of the same type and relating to the same line are not aggregated
Test purpose:	Check that indications of the same type and relating to the same line if line related are not sent in the same <<Events-notification>> IE
Reference:	TS 102 527-5 [15], clause 7.4.1.5.1 1 PP registered (TS_1 is NG PP1) TS_1 attached to line 0 in state F-00. Line 0 is a single call line
Time sequence:	s1 [USR] Perform an incoming call to IUT on line 0 a1 [IUT >> TS_1] {**CC-SETUP**} message with IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)> s2.1 [TS_1 >> IUT] {**CC-ALERTING**} message s2.2 [TS_1 >> IUT] (*1 second later*) {**CC-CONNECT**} message a2.1 [IUT >> TS_1] {**CC-CONNECT-ACK**} a2.2 [IUT >> TS_1] {**CC-INFO**} message with IE <<CALL-INFORMATION>> specifying (call id a, CS call connect) =<(1, 0, value a), (2, 1, 5)> s3 [TS_1 >> IUT] {**CC-RELEASE**} a3.1 [IUT >> TS_1] {**CC-RELEASE-COM**} a3.2 [IUT >> TS_1] (*optional*) {**FACILITY**} message with <<Events notification>> IE with: - event type/subt.=Line use ind./Line or system is busy (02H), - event multiplicity = Line 0 (00H) - event type/subtype = Handset use status indication/0, - event multiplicity = Line 0 (00H) a3.3 [IUT >> TS_1] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = Line use ind./Line is idle (00H), - event multiplicity = Line 0 (00H) - event type/subtype = handset use status indication/0, - event multiplicity = Line 0 (00H)
Pass criteria:	Verify all answers - The IUT is allowed to omit answer a3.2, but shall not send the successive values 'Line or system is busy' and 'Line is idle' (if both sent) in the same {FACILITY} message. - a3.2 if sent may be sent any time between a2.1 and a3.3.
Comments:	The IUT should send both indications (line use, handset use) relating to the same event in the same {FACILITY} message, but may however send them separately.

TC_FT_NG1.N.23_BV_105	Line related indication - PP newly attached to line
Test purpose:	Check that a PP newly attached to a line receives a diagnostic indication and only that PP. 1- Power up TS_2 (NOT attached to any line) 2- Attach TS_2 to line 0 (from TS_2 itself)
Reference:	TS 102 527-5 [15], clause 7.4.1.5.2.3
Initial condition:	2 PP registered (TS_1 is NG PP1, TS_2 is NG PP2) TS_1 attached to line 0 in state F-00 TS_2 is powered down and is NOT attached to any line
Time sequence:	s1.1 [USR] 1- Power up TS_2 (NOT attached to any line) s1.2 [TS_2>> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a1 [IUT >> TS_2] {**CC-CALL-PROC**} message s2 [TS_2 >> IUT] <**Start session**, List id = 'Line Settings List' > a2 [IUT >> TS_2] <**Start session confirm**, List id=08H, session id=B, total number=n, discriminator type=dt> 2- Attach TS_2 to line 0 (from TS_2 itself) s3 [TS_2 >> IUT] <**Read entry**, session id=B, start index=1, direction=0, counter=2, mark entries request = 00H, field ids at least=02H 03H (Line id, Attached handsets)> a3 [IUT >> TS_2] <**Read entry confirm**, session id=B, start index=1, counter=2>, followed by <**data packet/data packet last**> containing: - (entry id e) Line 0, Attached handsets. s4 [TS_2 >> IUT] <**Edit entry**, session id=B, entry id=e, field ids=03H> a4 [IUT >> TS_2] <**Edit entry confirm**, session id=B> s5 [TS_2 >> IUT] <**Save entry**, session id = B, entry id=e> followed by: **<data/data packet last>** with following entry: - (entry id e) Attached handsets with bits 1 and 2 set a5.1 [IUT >> TS_2] <**Save entry confirm**, session id =B, entry id=e, position index=p, total number=n> a5.2 [IUT >> TS_2] (*sent to TS_2 only*) {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic indication/line related change, - event multiplicity = Line 0 (00H) s6 [TS_1 >> IUT] <**End session**, session id=A> a6 [IUT >> TS_1] <**End session confirm**, session id=A> s7 [TS_1 >> IUT] {**CC-RELEASE**} a7 [IUT >> TS_1] {**CC-RELEASE-COM**} s8 [TS_2 >> IUT] <**End session**, session id=B> a8 [IUT >> TS_2] <**End session confirm**, session id=B> s9 [TS_2 >> IUT] {**CC-RELEASE**} a9 [IUT >> TS_2] {**CC-RELEASE-COM**}
Pass criteria:	Verify all answers NG PP1 shall not receive any diagnostic indication (as the {FACILITY} message is sent as a result of new attachment to TS_2 only) There shall be no list change notifications for the Line and Diagnostic Statuses List.
Comments:	

TC_FT_NG1.N.23_BV_106	Line related indication - Call forwarding
Test purpose:	Check that all PPs attached to line are notified of forwarded call status changes
Reference:	TS 102 527-5 [15], clause 7.4.34.1
Initial condition:	2 PP registered (TS_1 is NG PP1, TS_2 is NG PP2) TS_1 attached to line 0 in state F-00 TS_2 attached to line 0 in state F-00 Phone number b=23456789
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = 'Line Settings List' > a2 [IUT >> TS_1] <**Start session confirm**, List id = 08H, session id=A, total number=n, discriminator type=dt> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0, counter = 1, mark entries request = 00H, field idd=01H> a3 [IUT >> TS_1] <**Read entries confirm**, session id=A, start index=1, counter=1>, followed by <**data packet/data packet last**> containing: - entry for line 0 (entry id e). s4 [TS_1 >> IUT] <**Edit entry**, session id=A, entry id=e, list entry fields 1..3 = 0BH (CFU), 0CH (CFNA), 0DH (CFB)> a4 [IUT >> TS_1] <**Edit entry confirm**, session id = 1> followed by: <**data packet/data packet last**> with entry content for line 0 s5 [TS_1 >> IUT] <**Save entry**, session id=A, entry id=e> followed by: <**data packet/data packet last**> with entry id e as follows: - CFU activated, phone number=b - CFB activated, phone number=b - CFNA deactivated, phone number=b a5.1 [IUT >> TS_1] <**Save entry confirm**, session id = A, entry id=e> a5.2 [IUT >> TS_1,2] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = List change indication/Line Settings List, - event multiplicity =m (*total number of entries in the list*) a5.3 [IUT >> TS_1,2] {**FACILITY**} message with <Events notification>> IE with: - event type/subtype = diagnostic status ind./line related change, - event multiplicity = Line 0 (00H) s6 [TS_1 >> IUT] <**End session**, session id=A> a6 [IUT >> TS_1] <**End session confirm**, session id=A> s7 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List > a7 [IUT >> TS_1] <**Start session confirm**, List id = 0aH, session id=B, total number=2, discriminator type=dt> s8 [TS_1 >> IUT] <**Read entries,** session id=B, start index=1, direction=0, counter=2, mark entries request = 00H, list entry field ids=05H> a8 [IUT >> TS_1] <**Read entries confirm**, session id=B, start index=1, counter=2>, followed by <**data packet/data packet last**> containing (at least): - **Line 0**, Call forwarding status=(CFU=31H,CFNA=30H,CFB=31H) s9 [TS_1 >> IUT] <**End session**, session id=B> a9 [IUT >> TS_1] <**End session confirm**, session id=B> s10 [TS_1 >> IUT] {**CC-RELEASE**} a10 [IUT >> TS_1] {**CC-RELEASE-COM**}
Pass criteria:	Verify all answers There shall be no list change notifications for the Line and Diagnostic Statuses List.
Comments:	

TC_FT_NG1.N.23_BV_107	Non-line related indication - Network error
Test purpose:	Check that a non-line related network error is indicated correctly 1- LiA service call + session with Line and Diagnostic Statuses List for reading diag error status 2- Disconnect the main data cable (but leave power supply cable connected) and check: - presence of diagnostic indication - and OK status change in the list for line 0 and/or the system, depending on declarations
Reference:	TS 102 527-5 [15], clause 7.4.34.1
Initial condition:	One PP registered (TS_1 is NG PP1) NG PP1 (TS_1) attached to line 0 in state T-00
Time sequence:	1- LiA service call + session for reading diagnostic error status s1 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List > a2 [IUT >> TS_1] <**Start session confirm**, List id = 0aH, session id=A, total number=n, discriminator type=dt> s3 [TS_1 >> IUT] <**Read entries**, session id=A, start index=1, direction=0, counter=2, mark entries request = 00H, field ids 01H 02H 06H> a3 [IUT >> TS_1] <**Read entries confirm**, session id=A, start index=1, counter=2>, followed by <**data packet/data packet last**> containing: - Line id = 'None', OK status=up, Diagnostic error status=(no,0,0) - Line id = 0, OK status=up, Diagnostic error status=(no,0,0) s4 [USR] 2- Disconnect the main data cable from the IUT a4 [IUT >> TS_1] {**FACILITY**} message with <<Events notification>> IE with: (if FT_IXIT_17=YES, that is, main data cable enabled at least one non line related service) - event type/subtype=diagnostic ind./non-line related change, - event multiplicity=don't care (if FT_IXIT_29.9=YES, main data cable enabled use of line 0 - event type/subtype=diagnostic ind./line related change, - event multiplicity= Line 0 (00H) s5 [TS_1 >> IUT] <**Read entries**, session id = A, start index=1, direction=0, counter=2, mark entries req.=00H, field ids=01H 02H 06H> a5 [IUT >> TS_1] <**Read entries confirm**, session id=A, start index=1, counter=2>, followed by <**data packet/data packet last>**, containing: (if FT_IXIT_17=YES): - Line id='None', OK status=down, Diagnostic error status=('down', 'Network error', *any error number including possibly '0'*) (if FT_IXIT_29.9=YES) - Line id=0, OK status=down, Diagnostic error status=('down', 'Network error', *any error number including possibly '0'*) s6 [TS_1 >> IUT] <**End session**, session id=A> a6 [IUT >> TS_1] <**End session confirm**, session id=A> s7 [TS_1 >> IUT] {**CC-RELEASE**} a7 [IUT >> TS_1] {**CC-RELEASE-COM**}
Pass criteria:	Verify all answers In a5 at least FT_IXIT_17 or FT_IXIT_29.9 shall be YES. Both may be YES together. There shall be no list change notifications for the Line and Diagnostic Statuses List.
Comments:	

TC_FT_NG1.N.23_BV_108	Line and Diagnostic Statuses List is read-only
Test purpose:	Check that a PP attempting forbidden operation on the Line and Diagnostic Statuses List gets a negative acknowledgement. 1- Get Line 0 entry id 2- Attempt to edit Line 0 entry 3- Attempt to create a new entry 4- Attempt to deleted Line 0 entry 5- Attempt to empty the list
Reference:	TS 102 527-5 [15], clause 7.4.34.1
Initial condition:	1 PP registered (TS_1 is NG PP1), IUT is NG FP TS_1 attached to line 0 in state F-00
Time sequence:	1- Get Line 0 entry id s1 [TS_1 >> IUT] {**CC-SETUP**} message with <<BASIC-SERVICE **LiA**>> IE a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = Line and Diagnostic Statuses List > a2 [IUT >> TS_1] <**Start session confirm**, List id=0aH, session id=A, total number=2, discriminator type=dt> s3 [TS_1 >> IUT] <**Read entries**, session id=A, start index=1, direction=0, counter=2, mark entries req.=00H, list entry field ids=01H> a3 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index=1, counter=2>, followed by <**data packet/data packet last**> with: - Line 0 entry with entry id=e. 2- Attempt to edit Line 0 entry s4 [TS_1 >> IUT] <**Edit entry**, session id = A, entry id=e, List entry field id=01H> a4 [IUT >> TS_1] <**Negative acknowledgement**, 'Procedure not allowed'> s5 [TS_1 >> IUT] <**Save entry**, session id=A, entry id=e> a5 [IUT >> TS_1] <**Negative acknowledgement**, 'Procedure not allowed'> 3- Attempt to create a new entry s6 [TS_1 >> IUT] <**Save entry**, session id=A, entry id=0> a6 [IUT >> TS_1] <**Negative acknowledgement**, 'Procedure not allowed'> 4- Attempt to deleted Line 0 entry s7 [TS_1 >> IUT] <**Delete entry**, session id=A, entry id=e> a7 [IUT >> TS_1] <**Negative acknowledgement**, 'Procedure not allowed'> 5- Attempt to empty the list s8 [TS_1 >> IUT] <**Delete list**, session id=A> a8 [IUT >> TS_1] <**Negative acknowledgement**, 'Procedure not allowed'> s9 [TS_1 >> IUT] <**End session**, session id=A> a9 [IUT >> TS_1] <**End session confirm**, session id=A> s10 [TS_1 >> IUT] {CC-RELEASE} a10 [IUT >> TS_1] {CC-RELEASE-COM}
Pass criteria:	Verify all answers There shall be no list change notifications for the Line and Diagnostic Statuses List.
Comments:	

TC_FT_NG1.N.23_BV_109	Line related indication - Location registration of a PP
Test purpose:	Check that a PP doing a location registration receives a line related diagnostic indication
Reference:	TS 102 527-5 [15], clauses 7.4.1.5.2.3 and 7.4.34.2
Initial condition:	2 PP registered (TS_1 is NG PP1, TS_2 is NG PP2), IUT is NG FP NG PP1 is attached to line 0 in state F-00 NG PP2 is attached to line 0 and powered off
Time sequence:	s1 [TS_2 >> IUT] Perform location registration a1 [IUT >> TS_2] {**FACILITY**} message with <<Events notification>> IE with: - event type/subtype = diagnostic ind./Line related change, - event multiplicity = Line 0 (00H)
Pass criteria:	Verify all answers NG PP1 shall not receive any indication (as the {FACILITY} message is sent as a result of location registration to TS_2 only) There shall be no list change notifications for the Line and Diagnostic Statuses List.
Comments:	

7.43 TC_FT_NG1.N.24 Short Messaging Services (SMS) Test Cases

NOTE: "<<BASIC SERVICE **LiA**>> IE" is used as a shortcut for "<<BASIC-SERVICE>> IE with <Call class> = LiA service setup and <Basic service> = Wideband speech default setup attributes".

TC_FT_NG1.N.24_BV_101	SMS Settings List - SMS settings are available per SMS service
Test purpose:	Test that the FP stores SMS settings per SMS service
Reference:	TS 102 527-5 [15], clauses 7.4.35.1 and 7.4.10.3
Initial condition:	1 PP registered (TS_1) 2 SMS services are available, one on line 0 and one on line 1. The SMS services are: SMS Service id = 00H, Line id = 0, Enable SMS = 30H, Max SMS Size = A0H, SMSC Send Server = 00441234567890, SMSC Receive Server = 00441234560987, SMS Delivery Report = 31H, SMS Validity Period = A7H, Allowed SMS character encodings and variants = (value='TS 123 038 / GSM 7 bit', variants=(GSM 7 bit default)) SMS Service id = 3FH, Line id = 1, Enable SMS = 31H, Max SMS Size = A0H, SMSC Send Server = 00441234567777, SMSC Receive Server = 00441234568888, SMS Delivery Report = 30H, SMS Validity Period = A7H, Allowed SMS character encodings and variants = (value='UTF-8', variants=∅) IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = SMS Settings List> a2 [IUT >> TS_1] <**Start session confirm**, List id = SMS Settings List, session id = A> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field identifier 1 = 'SMS service id' List entry field identifier 2 = 'Line id' List entry field identifier 3 = 'Enable SMS' List entry field identifier 4 = 'Max SMS size' List entry field identifier 5 = 'SMSC Send Server' List entry field identifier 6 = 'SMSC Receive Server'> List entry field identifier 7 = 'SMS delivery report' List entry field identifier 8 = 'SMS validity period' List entry field identifier 9 = 'Allowed SMS character encodings and variants' a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index= 1, partial delivery = 0, counter = 02H> a3.2 [IUT >> TS_1] a series of <**data packet/data packet last**>'s with the content of the requested fields for the two entries. s4 [TS_1 >> IUT] <**End session**, session id = A> a4 [IUT >> TS_1] <**End session confirm**, session id = A> s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the entries in a3.2 are in 'Line id' order. Verify that the settings for the SMS services respectively using line 0 and line 1 are as in the initial conditions.
Comments:	

TC_FT_NG1.N.24_BV_102	Incoming SMS List - UTF-8 encoded SMS content between FP and PPs
Test purpose:	Test that the FP returns a correctly encoded UTF-8 SMS content, with the following steps: 1- Reading all fields of entry 0 (empty SMS) 2- Reading SMS content of entry 1
Reference: Initial condition: Time sequence:	TS 102 527-5 [15], clauses 7.4.35.1 and 7.4.10.3 1 PP registered (TS_1) The Incoming SMS List on IUT has the following two entries (e.g. sent to it via SMSC Receive server): **Entry 0 (list index 1) with a minimum-length SMS message:** Number +441311234567, Name 'Tester', Date and time of '1544 21/5/12', Read status of 'unread', SMS service id of 0, SMS size of 0, SMS content '' (empty); **Entry 1 (list index 2) with a maximum-length SMS message**, and field contents as in entry 0, except for: - the SMS size of 320 and - the SMS content = " ΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞ ΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞ ΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞ ΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞΔΦΓΛΩΠΨΣΘΞ" NOTE: This is 'ΔΦΓΛΩΠΨΣΘΞ' repeated sixteen times. IUT is in F-00 s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list Id = Incoming SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Incoming SMS List, session id = A> 1- Reading all fields of entry 0 (empty SMS) s3 [TS_1 >> IUT] <**Read entries**, Session identifier = A, start index = 1,direction = 0 (forward), counter = 1, List entry field identifier 1 = 01H ('Number'), List entry field identifier 2 = 02H ('Name'), List entry field identifier 3 = 03H ('Date and Time'), List entry field identifier 4 = 04H ('Read status'), List entry field identifier 5 = 05H ('SMS service id') List entry field identifier 6 = 06H ('SMS size') List entry field identifier 7 = 07H ('SMS content')> a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index= 1, partial delivery =0, counter = 1> a3.2 [IUT >> TS_1] <**data packet/data packet last**>, session id = A, data content of entry fields 'Number', 'Name', 'Date and Time', 'SMS service id', 'SMS size', 'SMS content' with the values indicated in the initial conditions for entry 0> 2- Reading SMS content of entry 1 s4 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 2, direction = 0 (forward), counter = 1, List entry field identifier 1 = 07H ('SMS content')> a4.1 [IUT >> TS_1] <**Read entries confirm**, session identifier = A, start index = 2, direction = 0 (forward), partial delivery = 0, counter = 1> a4.2 [IUT >> TS_1] a series of <**data packet/data packet last**>'s, with session id = A, data content of field 07H (SMS content), containing the SMS content as set in the initial conditions for entry 1. s5 [TS_1 >> IUT] <**End session**, session id = A> a5 [IUT >> TS_1] <**End session confirm**, session id = A>

	s6 [TS_1 >> IUT] {**CC-RELEASE**} message a6 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. In a3.2 and a4.2, verify that the received SMS content is correctly encoded in UTF-8 and is equal at octet level to the content indicated in the initial conditions for entries 0 or 1 of the Incoming SMS List.
Comments:	This test also verifies that all fields in the Incoming SMS List are supported. The UTF-8 encoding of the repeated string in the maximum length message is 'ce94cea6ce93ce9bcea9cea0cea8cea3ce98ce9e'H.

TC_FT_NG1.N.24_BV_103	List of Supported Lists - SMS lists are present in the List of Supported Lists
Test purpose:	Test that the FP supports all SMS lists
Reference:	TS 102 527-5 [15], clause 7.4.35.1
Initial condition:	1 PP registered (TS_1) IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = List of Supported Lists> a2 [IUT >> TS_1] <**Start session confirm**, list id = List of Supported Lists, session id = A> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1,List entry field identifier 1 = 01H 'List Identifiers'> a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index= 1, partial delivery = 0, counter = 1> a3.2 [IUT >> TS_1] <**data packet/data packet last**>'s, session id = A, data content with a single entry with one field ('List identifiers')> s4 [TS_1 >> IUT] <**End session**, session id = A> a4 [IUT >> TS_1] <**End session confirm**, session id = A> s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the 'List identifiers' field contains the list identifiers for all of the SMS lists -- SMS Settings List, Incoming SMS List, Sent SMS List and Draft SMS List.
Comments:	

TC_FT_NG1.N.24_BV_104	Incoming SMS List - read selected entries
Test purpose:	Test that the FP supports read selected entries (Incoming SMS List) 1- Test selection from entry id with range (simple selection) 2- Test selection from entry id with range with lower bound of 0 3- Test selection from entry id with range with upper bound beyond end of content 4- Test selection from entry identifiers **Test support of negative acknowledgement in the following steps:** 5- Test selection from entry identifiers with bad session id 6- Test selection from entry identifiers with unavailable entry ids 7- Test selection from entry id with range with upper bound greater than lower bound 8- Test selection from entry id with range with lower bound beyond end
Reference:	TS 102 527-5 [15], clauses 7.4.35.1 and 7.4.10.4.11
Initial condition:	1 PP registered (TS_1) Incoming SMS List has the following three entries (in this order): **Entry 1 (with entry id 1) with a minimum-length SMS message:** Number +441311234567, Name 'Tester', Date and time of '1544 21/5/12', Read status of 'unread', SMS service id of 0, SMS size of 0, SMS content '' (empty); **Entry 2 (with entry id 2) with an SMS message with UTF-8 codepoints above U+007F**, and field contents as in entry 0, except for SMS size of 139 and SMS content = "Esperanto (původně Lingvo Internacia - „mezinárodní jazyk") je nejrozšířenějším mezinárodním plánovým jazykem. Název j" **Entry 3 (with entry id 3) with a SMS message:** Number +441311234567, Name 'Tester', Date and time of '1544 21/5/12', Read status of 'unread', SMS service id of 0, SMS size of 84, SMS content 'SS provides additional capabilities to be used with bearer services and teleservices'; IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = Incoming SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Incoming SMS List, session id = A> 1- Test selection from entry id with range (simple selection) s3 [TS_1 >> IUT] <**Read selected entries**, session id=A, start index=2, direction=0 (forward), counter = 1, Mark entries request = 00H, Number of entry field ids = 1, List entry field id 1 = 07H (SMS content), with: - Selection type = 01H ('selection from entry id with range'), and - Selection description as follows: - Entry id = 2, Field id = 07H, - Byte range lower bound = 21, Byte range upper bound = 27> a3.1 [IUT >> TS_1] <**Read selected entries confirm**, session id=A, partial delivery=0, counter = 1> a3.2 [IUT >> TS_1] <**data packet/data packet last**, session id = A, data content with a single entry with one field ('SMS Content') containing the text 'Lingvo'> 2- Test selection from entry id with range with lower bound of 0 s4 [TS_1 >> IUT] <**Read selected entries**, session id=A, start index=1, direction=0 (forward), counter = 1, Mark entries request = 00H, Number of entry

		field ids = 1, List entry field id 1 = 07H (SMS content), with: - Selection type = 01H ('selection from entry id with range'), and - Selection description as follows: - Entry id = 1, Field id = 07H, - Byte range lower bound = 0, Byte range upper bound = 0>
a4.1	[IUT >> TS_1]	<**Read selected entries confirm**, session id=A, partial delivery=0, counter=1>
a4.2	[IUT >> TS_1]	<**data packet/data packet last**, session id = A, data content with a single entry with one field ('SMS Content') containing the text '' (an empty string)>
		3- Test selection from entry id with range with upper bound beyond end of content
s5	[TS_1 >> IUT]	<**Read selected entries**, session id=A, start index=3, direction = 0 (forward), counter = 1, Mark entries request = 00H, Number of entry field ids = 1, List entry field id 1 = 07H (SMS content), with: - Selection type = 01H ('selection from entry id with range'), and - Selection description as follows: - Entry id=3, Field id = 07H - Byte range lower bound = 3, Byte range upper bound = 127>
a5.1	[IUT >> TS_1]	<**Read selected entries confirm**, session id=A, partial delivery=0, counter=1>
a5.2	[IUT >> TS_1]	<**data packet/data packet last**, session id=A, data content with a single entry with one field ('SMS Content') containing the text 'provides additional capabilities to be used with bearer services and teleservices'>
		4- Test selection from entry identifiers
s6	[TS_1 >> IUT]	<**Read selected entries**, session id = A, start index=1, direction=0 (forward), counter = 3, Mark entries request = 00H, Number of entry field identifiers = 1, List entry field identifier 1 = 07H (SMS content), Selection type = 00H ('selection from entry identifiers'), and - Selection description as follows: -, Number of requested entries = 2, - Entry identifier 1 = 1, Entry identifier 2 = 3>
a6.1	[IUT >> TS_1]	<**Read selected entries confirm**, session id = A, partial delivery = 0, counter = 1>
a6.2	[IUT >> TS_1]	<**data packet/data packet last**, session id = A, data content with a <Entry id 0 = 1 Entry field id 1 = 'SMS Content' content the text = '' (an empty string)> <Entry id 1 = 3 Entry field id 1 = 'SMS Content' content the text = 'SS provides additional capabilities to be used with bearer services and teleservices'>>
		5- Test selection from entry identifiers with bad session id (negative acknowledgement used)
s7	[TS_1 >> IUT]	<**Read selected entries**, session id = 99, start index=1, direction=0 (forward), counter = 3, Mark entries request = 00H, Number of entry field ids = 1, List entry field id 1 = 07H (SMS content), - Selection type = 00H ('selection from entry identifiers'), and - Selection description as follows: -, Number of requested entries = 2, Entry id 1 = 99, Entry id 2 = 98>
a7	[IUT >> TS_1]	<**Negative acknowledgement**, session id = A. Reject reason = 02H (invalid session number)>
		6- Test selection from entry identifiers with unavailable entry ids (negative acknowledgement used)
s8	[TS_1 >> IUT]	<**Read selected entries**, session id = A, start index=1, direction=0 (forward), counter = 3, Mark entries request = 00H, Number of entry field identifiers = 1, List entry field identifier 1 = 07H (SMS content), Selection type = 00H ('selection from entry identifiers'), and - Selection description as follows: -, Number of requested entries = 2, Entry id 1 = 99, Entry id 2 = 98>
a8	[IUT >> TS_1]	<**Negative acknowledgement**, session id = A. Reject reason = 01H (entry not available)>
		7- Test selection from entry id with range with upper bound greater than lower bound (negative acknowledgement used)

	s9	[TS_1 >> IUT]	<**Read selected entries**, session id = A, start index = 3, direction = 0 (forward), counter = 1, Mark entries request = 00H, Number of entry field ids = 1, List entry field id 1 = 07H (SMS content), - Selection type = 01H ('selection from entry id with range'), and - Selection description as follows: - Entry id = 3, Field id = 07H - Byte range lower bound = 5, Byte range upper bound = 4>
	a9	[IUT >> TS_1]	<**Negative acknowledgement**, session id = A. Reject reason = 00H (invalid range)>
			8- Test selection from entry id with range with lower bound beyond end (negative acknowledgement used)
	s10	[TS_1 >> IUT]	<**Read selected entries**, session id = A, start index = 3, direction = 0 (forward), counter = 1, Mark entries request = 00H, Number of entry field ids = 1, List entry field id 1 = 07H (SMS content), - Selection type = 01H ('selection from entry id with range'), and - Selection description as follows: - Entry id = 3, Field id = 07H, - Byte range lower bound = 100, Byte range upper bound = 101>
	a10	[IUT >> TS_1]	<**Negative acknowledgement**, session id = A. Reject reason = 00H (invalid range)
	s11	[TS_1 >> IUT]	<**End session**, session id = A>
	a11	[IUT >> TS_1]	<**End session confirm**, session id = A>
	s12	[TS_1 >> IUT]	{**CC-RELEASE**} message
	a12	[IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.		
Comments:	It is assumed that session id 99 is not a valid session id during this test. In initial conditions for entry 1, the SMS content is given below with UTF-8 encoding of special characters: "Esperanto (p'c5af'Hvodn'c49b'H Lingvo Internacia 'e28093'H 'e2809e'Hmezin'c3a1'Hrodn'c3ad'H jazyk'e2809c'H) je nejroz'c5a1'H'c3ad'H'c599'Hen'c49b'Hj'c5a1'H'c3ad'Hm mezin'c3a1'Hrodn'c3ad'Hm pl'c3a1'Hnov'c3bd'Hm jazykem. N'c3a1'Hzev j" and in hexadecimal representation:' 4573706572616e746f202870c5af766f646ec49b204c696e67766f20496e7465 726e6163696120e2809320e2809e6d657a696ec3a1726f646ec3ad206a617a79 6be2809c29206a65206e656a726f7ac5a1c3adc599656ec49b6ac5a1c3ad6d20 6d657a696ec3a1726f646ec3ad6d20706cc3a16e6f76c3bd6d206a617a796b65 6d2e204ec3a17a6576206a	

TC_FT_NG1.N.24_BV_105	Incoming SMS List - UTF-8 encoded SMS content between FP and PPs
Test purpose:	Test that the FP returns to the PP an UTF-8 encoded SMS content when the original incoming short message was encoded in TS 123 038/ GSM 7bit default [17]
Reference:	TS 102 527-5 [15], clauses 7.4.35.1 and 7.4.35.4.2.8
Initial condition:	1 PP registered (TS_1) The Incoming SMS List on IUT is empty. IUT is in F-00
Time sequence:	s1.1 [SMS-C-Send] IUT receives a short message encoded in TS 123 038/GSM 7bit default with content 'Some of the characters from the GSM default alphabet: @£$¥èéùìòÇØøÅåΔ_ΦΓΛΩΠΨΣΘΞÆæßÉ!"#¤%&'()*+¡ÄÖÑÜ§¿äöñüà' Note that there are two SPACE characters after the COLON character. s1.2 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = Incoming SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Incoming SMS List, session id = A> s3 [TS_1 >> IUT] <**Read entries**, Session identifier = A, start Index = 1,direction = 0 (forward), counter = 1, List entry field identifier 1 = 07H ('SMS content')> a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index= 1, partial delivery =0, counter = 1> a3.2 [IUT >> TS_1] <**data packet/data packet last**>, session id = A, data content of entry fields 'Number', 'Name', 'Date and Time', 'SMS service id', 'SMS size', 'SMS content' with the string indicated in the initial conditions in UTF-8 format> s4 [TS_1 >> IUT] <**End session**, session id = A> a4 [IUT >> TS_1] <**End session confirm**, session id = A> s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. In a3.2, verify that the received SMS content is correctly encoded in UTF-8.
Comments:	An SMS in the Incoming SMS List can only be encoded in UTF-8, whatever the encoding used on network side. The UTF-8 encoding of the incoming SMS text in s1.1 is ' 536f6d65206f662074686520636861726163746572732066726f6d2074686520 47534d2064656661756c7420616c7068616265743a202040c2a324c2a5c3a8c3 a9c3b9c3acc3b2c387c398c3b8c385c3a5ce945fcea6ce93ce9bcea9cea0cea8 cea3ce98ce9ec386c3a6c39fc38921e2809d23c2a42526e2809928292a2bc2a1 c38420c396c391c39cc2a7c2bfc3a4c3b6c3b1c3bcc3a0'h

TC_FT_NG1.N.24_BV_301	Outgoing SMS List - Network side SMS encoding set to 'Unknown'
Test purpose:	Test that the FP accepts a Network side SMS character encoding set to 'Unknown' when sending a new SMS directly via the Outgoing SMS List
Reference:	TS 102 527-5 [15], clause 7.4.35.3
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = Outgoing SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Outgoing SMS List, session id = A> s3 [TS_1 >> IUT] <**Query supported entry fields**, session id = A> a3 [IUT >> TS_1] <**Query supported entry fields confirm**, session id = A, number of editable entry fields = 07H, and List entry field identifiers as follows: 01H (Number) 02H (Name) 03H (Date and Time) 04H (SMS service id) 05H (Network side SMS encoding) 06H (SMS size) 07H (SMS content)> s4.1 [TS_1 >> IUT] <**Save entry**, session id = A, entry id = 0 (new entry)> s4.2 [TS_1 >> IUT] <**data packet/data packet last'**, session id = A, Entry field identifier 1 of SMS content with UTF-8 encoded string 'Network Encoding unknown' Entry field identifier 2 of 'SMS service id' set to 0, Entry field identifier 3 of 'Network side SMS encoding' set to ('Unknown','Unknown', 'Unknown')> Entry field identifier 4 of 'Number' set to 1234567890 a4.1 [IUT >> TS_1] <**Save entry confirm**, session id = A, entry id = E> a4.2 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id F, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication'/ Sent SMS List - event multiplicity=don't care - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0) s5 [TS_1 >> IUT] <**End session**, session id = A> a5 [IUT >> TS_1] <**End session confirm**, session id = A> s6 [TS_1 >> IUT] {**CC-RELEASE**} message a6 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP sends the short message to the SMSC with an appropriate network side encoding that is included in the 'Allowed SMS character encodings and variants' field for SMSC with 'SMS service id' 0.
Comments:	In this test case, the PT does not need to access the SMS Settings List for knowing the 'Allowed SMS character encodings and variants' field value. In a4.2, the added entry id F notified in the Sent SMS List may differ from entry id E in the Outgoing SMS List (even for the same SMS). In a4.2, the originating PP field is set to 0 as it is the FP that moves the SMS from Outgoing SMS List to Sent SMS List. The short message is assumed to have been sent successfully before the network timer (CC.NG.03) expired, so that no notification is expected for addition/deletion of this SMS entry to/from the Outgoing SMS List.

TC_FT_NG1.N.24_BV_302	Outgoing SMS List - Network side SMS encoding set to default GSM 7 bit	
Test purpose:	Test that the FP accepts a Network side SMS character encoding set to default GSM 7 bit with no variants	
Reference:	TS 102 527-5 [15], clause 7.4.35.3	
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The SMS service for line 0 has the following settings: SMS Service id = 00H, Line id = 0, Enable SMS = 30H, Max SMS Size = A0H, SMSC Send Server = 00441234567890, SMSC Receive Server = 00441234560987, SMS Delivery Report = 31H, SMS Validity Period = A7H, Allowed SMS character encodings and variants = (value='TS 123 038 / GSM 7 bit', variants=(GSM 7 bit default)) IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, List id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, List id = SMS Settings List session id = A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, with the following field ids: List entry field identifier 1 = 'SMS service id' List entry field identifier 2 = 'Line id' List entry field identifier 3 = 'Enable SMS' List entry field identifier 4 = 'Max SMS size' List entry field identifier 5 = 'SMSC Send Server' List entry field identifier 6 = 'SMSC Receive Server' List entry field identifier 7 = 'SMS delivery report' List entry field identifier 8 = 'SMS validity period' List entry field identifier 9 = 'Allowed SMS character encodings and variants'>
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, start index= 1, Partial delivery/Counter = 1>
	a3.2 [IUT >> TS_1]	a series of <**data packet/data packet last**>'s with the content of the requested fields for line 0 as specified in the initial conditions.
	s4 [TS_1 >> IUT]	<**End session**, session id = A>
	a4 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s5 [TS_1 >> IUT]	<**Start session**, list id = Outgoing SMS List>
	a5 [IUT >> TS_1]	<**Start session confirm**, list id = Outgoing SMS List session id = A>
	s6.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s6.2 [TS_1 >> IUT]	<**data packet/data packet last'**, session id = A, Entry field identifier 1 of 'Number' set to +441311234567 Entry field identifier 2 of 'Name' set to 'Seth Åkesson' Entry field identifier 3 of 'SMS service id' set to 0, Entry field identifier 4 of 'Network side SMS encoding' set to ('Encoding value = TS 123 038/GSM 7 bit', Variant 1=0, Variant 2=0) Entry field identifier 5 of 'SMS size' set to 74 Entry field identifier 6 of SMS content with the following TS 123 038/GSM 7 bit encoded string: 'SMS directly added to Outgoing SMS List and sent with a specified encoding'
	a6.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a6.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id F, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication'/Sent SMS List - event multiplicity=don't care - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>

	s8 [TS_1 >> IUT] {**CC-RELEASE**} message a8 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP sends the SMS to the SMSC with a network side encoding of TS 123 038/7 bit using the default tables.
Comments:	In s3, the used command could be a Search entries. In s5, the Start session command shall be sent within a second otherwise the DECT link may be released. In a6.2, the added entry id F notified in the Sent SMS List may differ from entry id E in the Outgoing SMS List (even for the same SMS). In a6.2, the originating PP field is set to 0 as it is the FP that moves the SMS from Outgoing SMS List to Sent SMS List. The short message is assumed to have been sent successfully before the network timer (CC.NG.03) expired, so that no notification is expected for addition/deletion of this SMS entry to/from the Outgoing SMS List.

TC_FT_NG1.N.24_BV_303	Draft SMS List - Sending of SMS after PP sets the 'Sending request' field of that list	
Test purpose:	Test that the FP actually sends a short message added to the draft list	
Reference:	TS 102 527-5 [15], clause 7.4.35.3	
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The Sent SMS List is empty IUT is in F-00	
Time sequence:		Send the short message
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Draft SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Draft SMS List, session id = A>
	s3 [TS_1 >> IUT]	<**Query supported entry fields**, session id = A>
	a3 [IUT >> TS_1]	<**Query supported entry fields confirm**, session id = A, number of editable entry fields = 08H, List entry field identifiers as follows: 01H Number, 02H Name 03H Date and Time 04H SMS service id 05H Sending request 06H Network side SMS encoding 07H SMS size 08H SMS content>
	s4.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s4.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, Entry field identifier 1 of 'Number' set to '+441311234567' Entry field identifier 2 of 'Name' set to 'Noël Bérubé' Entry field identifier 3 of 'SMS service id' set to 0 Entry field identifier 4 of 'Sending request' set to 0, Entry field identifier 5 of 'Network side SMS encoding'=('Unknown', 'Unknown', 'Unknown') Entry field identifier 6 of 'SMS size' set to 42 Entry field identifier 7 of SMS content with the following UTF-8 encoded string: 'short message in Draft SMS List to be sent'
	a4.1 [IUT >> TS_1]	<**Save entry confirm**, Session id = A, entry id = E>
	a4.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - addition, entry id E, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity= - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	s5 [TS_1 >> IUT]	<**Edit entry** session id = A, entry id = E>
	a5 [IUT >> TS_1]	<**Edit entry confirm**>
	s6.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = E>
	s6.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = E, Entry field 1 of 'Sending request' set to 1,
	a6.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a6.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<List change details>> with: - originating PP = TS_1 - deletion, entry id E - IE <<Events notification>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	a6.3 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with:

		- originating PP = 0, - addition, entry id F - IE <<Events notification>> with: - event type/subtype of 'List change indication/Sent SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
		Check the short message was moved to the Sent SMS List
	s8 [TS_1 >> IUT]	<**Start session**, List id = Sent SMS List>
	a8 [IUT >> TS_1]	<**Start session confirm**, List id = Sent SMS List, session id = B>
	s9 [TS_1 >> IUT]	<**Query supported entry fields**, session id = B>
	a9 [IUT >> TS_1]	<**Query supported entry fields confirm**, session id = B, number of editable entry fields = 07H, List entry field identifiers as follows: 01H Number 02H Name 03H Date and Time 04H SMS service id 05H Network side SMS encoding 06H SMS size 07H SMS content>
	s10 [TS_1 >> IUT]	<**Read entries**, session id = B, start index = 1, direction = 0 (forward), counter = 1 List entry field identifier 1 (SMS Content)>
	a10.1[IUT >> TS_1]	<**Read entries confirm**, session id = B, start index= 1, partial delivery = 0, counter = 1>
	a10.2[IUT >> TS_1]	<**Data packet/data packet last**, session id = B, entry id = F, Entry field identifier 1 of SMS content with data in UTF-8 of 'short message in Draft SMS List to be sent'
	s11 [TS_1 >> IUT]	<**Delete entry**, session id = B, entry id = F>
	a11 [IUT >> TS_1]	<**Delete entry confirm**, session id = B, Total number of available entries = 0>
	s12 [TS_1 >> IUT]	<**End session**, session id = B>
	a12 [IUT >> TS_1]	<**End session confirm**, session id = B>
	s13 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a13 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP sends the short message to the SMSC send server.	
Comments:	In a6.2 and a6.3, the two list change indications may form part of one {FACILITY} message. In a6.3 the added entry id F notified in the Sent SMS List may differ from entry id E in the Draft SMS List (even for the same SMS). In a6.3, the originating PP field is set to 0 as it is the FP that moves the SMS from Outgoing SMS List to Sent SMS List. The short message is assumed to have been sent successfully before the network timer (CC.NG.03) expired, so that NO notification is expected for addition/deletion of this SMS entry to/from the Outgoing SMS List. This test also checks that all possible fields in the Draft and Sent SMS Lists are supported by the IUT.	

TC_FT_NG1.N.24_BV_304	Outgoing SMS List - Sending of SMS within <CC.NG.03> timer	
Test purpose:	Test that for an SMS directly added to the Outgoing SMS List and sent successfully within <CC.NG.03> timer, the FP only notifies PPs of SMS addition in the Sent SMS List.	
Reference:	TS 102 527-5 [15], clause 7.4.35.3	
Initial condition:	1 PP registered (TS_1). TS_1 indicates 'Support of extended notifications' The Sent SMS List is empty IUT is in F-00	
Time sequence:		1- Add a new SMS to the Outgoing SMS List
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Outgoing SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Outgoing SMS List, session id=A>
	s3.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s3.2 [TS_1 >> IUT]	<**Data packet/data packet last**', session id = A, entry id = E, Entry field identifier 1 of 'Number' set to '+331311234567' Entry field identifier 2 of 'Name' set to 'Árvök Böðvarsdóttir' Entry field identifier 4 of 'SMS service id' set to 0> Entry field identifier 5 of 'Network side SMS encoding' = ('Unknown','Unknown', 'Unknown') Entry field identifier 6 of 'SMS size' set to 85 Entry field identifier 7 of 'SMS content' with the following UTF-8 encoded string: 'SMS directly added to Outgoing SMS List and sent successfully within <CC.NG.03> timer'
	a3.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a3.2 [IUT >> TS_1]	**{FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = F, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype = 'List change indication/Sent SMS List' - event multiplicity=1 message in total - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	s4 [TS_1 >> IUT]	<**End session**, session id = A>
	a4 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s5 [TS_1 >> IUT]	<**Start session**, list id = Sent SMS List>
	a5 [IUT >> TS_1]	<**Start session confirm**, list id = Sent SMS List, session id = B>
	s6 [TS_1 >> IUT]	<**Read entries**, session id = B, start index = 1, direction = 0 (forward), counter = 1, List entry field identifier 1 = SMS Content>
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id = B, start index= 1, partial delivery = 0, counter = 1>
	a6.2 [IUT >> TS_1]	<**data packet/data packet last**, session id = B, entry id = F, Entry field identifier 1 of SMS content with UTF-8 encoded string ' SMS directly added to Outgoing SMS List and sent successfully within <CC.NG.03> timer '>
	s7 [TS_1 >> IUT]	<**Delete entry**, session id = B, entry id = F>
	a7 [IUT >> TS_1]	<**Delete entry confirm**, session id = B, Total number of available entries = 0>
	s8 [TS_1 >> IUT]	<**Read entries**, session id = B, start index = 1, direction = 0 (forward), counter = 1, List entry field identifier 1 = SMS Content>
	a8.1 [IUT >> TS_1]	<**Read entries confirm**, session id = B, start index= 1, partial delivery =0, counter = 0>
	a8.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1 - deletion, entry id F - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/Sent SMS List' - event multiplicity=0

	- IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0) s9 [TS_1 >> IUT] <**End session**, session id = B> a9 [IUT >> TS_1] <**End session confirm**, session id = B> s10 [TS_1 >> IUT] {**CC-RELEASE**} message a10 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. In a3.2, check that IUT only notifies changes for the Sent SMS List Verify that the FP sends the short message to the SMSC send server.
Comments:	In this test case, the SMS is assumed to have been sent successfully before the sending to network failure timer <CC.NG.03> expired. In s3.2, UTF-8 encoding of 'Árvök Böðvarsdóttir' is 'efbbbfc3817276c3b66b2042c3b6c3b07661727364c3b374746972'. In a3.2, the added entry id F notified in the Sent SMS List may differ from entry id E in the Outgoing SMS List (even for the same SMS). In a3.2, the originating PP field is set to 0 as it is the FP that moves the SMS from Outgoing SMS List to Sent SMS List. As the SMS is sent within <CC.NG.03> timer, no notification is sent for addition/deletion of this SMS entry to/from the Outgoing SMS List. In a3.2 the {FACILITY} message may be sent from a3.2 until a4 time+<CC.NG02>duration. In s5 the new session shall be started before IUT link maintain timer (at least 1 s) expires. In a8.2 the {FACILITY} message may be sent from a8.2 until a9 time+<CC.NG.02>duration.

TC_FT_NG1.N.24_BV_305	Outgoing SMS List - Sending of SMS after <CC.NG.03> timer expiry	
Test purpose:	Test that for an SMS directly added to the Outgoing SMS List and sent after <CC.NG.03> timer expiry, the FP notifies PPs: - just after timer expiry, of SMS addition in the Outgoing SMS List. - in case of successful sending after this expiry, of entry deletion from Outgoing SMS List and entry addition in Sent SMS List.	
Reference:	TS 102 527-5 [15], clause 7.4.35.3	
Initial condition:	1 PP registered (TS_1). TS_1 indicates 'Support of extended notifications' There is one SMS service on line 0 with SMS service id 0. The Sent SMS List is empty The Outgoing SMS List is empty IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Outgoing SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Outgoing SMS List session id = A>
	s3.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s3.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Number' set to '+39121234567' Entry field identifier 2 of 'Name' set to 'Waldemar Düsediekerbäumer' Entry field identifier 3 of 'SMS service id' set to 0 Entry field identifier 4 of 'Network side SMS encoding' = 'Unknown' Entry field identifier 5 of 'SMS size' set to 85 Entry field identifier 6 of SMS content with UTF-8 encoded string 'SMS directly added to Outgoing SMS List and sent successfully after <CC.NG.03> expiry'>
	a3 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	s4 [SMS-C-Send]	Delayed acceptance of the SMS until after the 'sending to network failure' timer <CC.NG.03> has expired
	a4.1 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = E, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype = 'List change indication/Outgoing SMS List' - - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	a4.2 [IUT >> TS_1]	{**FACILITY**} message with - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = F, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype = 'List change indication/Sent SMS List - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	a4.3 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - deletion, entry id = E - IE <<**Events notification**>> with: - event type/subtype = 'List change indication/Outgoing SMS List' - event multiplicity=0 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	s5 [TS_1 >> IUT]	<**End session**, session id = A>
	a5 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s6 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a6 [IUT >> TS_1]	{**CC-RELEASE-COM**} message

Pass criteria:	Verify all answers. Verify that the FP sends the short message to the SMSC send server.
Comments:	In this test case, the SMS is assumed to have been sent successfully, but only after the 'sending to network failure' timer <CC.NG.03> expired. In s4, the used SMS-C Send server is configured to prevent sending of SMS for a time duration equal to <CC.NG.03>. In a4.2 and a4.3, the list change indications may or may not form part of the same {FACILITY} message.

TC_FT_NG1.N.24_BV_306	Draft SMS List - write entry	
Test purpose:	Test the write entry replace operation by editing a short message text 1- Open session and add new SMS with initial content as follows: "there is the autumn of our discontent made glorious spring" 2- Test replacement at start, with the following result: "now is the autumn of our discontent made glorious spring" 3- Test from TS_2 that lock is kept after write entry 4- Test replacement in middle, with the following result: "now is the winter of our discontent made glorious spring" 5- Test replacement at end, with the following result: "now is the winter of our discontent made glorious summer" 6- Remove the lock on the entry and test from TS_2 that it has been removed	
Reference:	TS 102 527-5 [15], clause 7.4.10.4.12.1	
Initial condition:	2 PPs registered (TS_1, TS_2) There is one SMS service on line 0 with SMS service id 0. The Draft SMS List is empty IUT is in F-00	
Time sequence:		1- Open session and add new SMS with initial content
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Draft SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Draft SMS List, session id = A>
	s3.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s3.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Number' set to '+441311234111' Entry field identifier 2 of 'Name' set to 'Richard III' Entry field identifier 3 of 'SMS service id' set to 0 Entry field identifier 4 of 'Sending request' set to 0, Entry field identifier 5 of 'Network side SMS encoding'='Unknown' Entry field identifier 6 of 'SMS size' set to 58 Entry field identifier 7 of 'SMS content' with UTF-8 encoded string 'there is the autumn of our discontent made glorious spring'
	a3.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a3.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1 - addition, entry id = E, position indicator=0 - IE <<**Events notification**>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	s4 [TS_1 >> IUT]	<**Edit entry**, session id = A, entry id = E, List entry field id 1 = 8>
	a4 [IUT >> TS_1]	<**Edit entry confirm**, session id = A>
		2- Test replacement at start
	s5.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = E, Field identifier = 8, Byte range lower bound = 0, Byte range upper bound = 5>>
	s5.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'now'
	a5 [IUT >> TS_1]	<**Write entry confirm**, session id = A, entry id = E, Position index=1, Total number of Entries = 1>
	s6 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = E, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = E>
	a6.2 [IUT >> TS_1]	**<Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'now is the autumn of our discontent made glorious spring'
		3- Test from TS_2 that lock is kept after write entry
	s7 [TS_2 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a7 [IUT >> TS_2]	{**CC-CALL-PROC**} message

	s8 [TS_2 >> IUT]	<**Start session**, list id = Draft SMS List>
	a8 [IUT >> TS_2]	<**Start session confirm**, list id = Draft SMS List, session id = B>
	s9 [TS_2 >> IUT]	<**Edit entry**, session id = B, entry id = E, List entry field id 1 = 8>
	a9 [IUT >> TS_2]	<**Negative Acknowledgement**, session id = B, Reject reason 'temporarily not possible'>
		4- Test replacement in middle
	s10.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = E, Field identifier = 8, Byte range lower bound = 11, Byte range upper bound = 17>>
	s10.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'winter'
	a10 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=E, Position index=1, Total number of Entries = 1>
	s11 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a11.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = E>
	a11.2 [IUT >> TS_1]	**<Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'now is the winter of our discontent made glorious spring'
		5- Test replacement at end
	s12.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = E, Field identifier = 8, Byte range lower bound = 50, Byte range upper bound = 56>>
	s12.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id=A, entry id=E, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'summer'
	a12 [IUT >> TS_1]	<**Write entry confirm**, Session id=A, entry id=E, Position index=1, Total number of Entries = 1>
	s13 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field identifier 1 = 07H (SMS content) >
	a13.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = E>
	a13.2 [IUT >> TS_1]	**<Data packet/data packet last**, session id = A, entry id = E, Entry field identifier of 'SMS content' with UTF-8 encoded string 'now is the winter of our discontent made glorious summer'
		6- Remove the lock on the entry and test from TS_2 that it has been removed
	s14.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = E>
	s14.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Sending request' set to 0
	a14 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	s15 [TS_2 >> IUT]	<**Edit entry**, session id = B, entry id = E, List entry field id 1 = 8>
	a15 [IUT >> TS_2]	<**Edit entry confirm**, session id = B>
	s16 [TS_1 >> IUT]	<**End session**, session id = A>
	a16 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s17 [TS_2 >> IUT]	<**End session**, session id = B>
	a17 [IUT >> TS_2]	<**End session confirm**, session id = B>
	s18 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a18 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
	s19 [TS_2 >> IUT]	{**CC-RELEASE**} message
	a19 [IUT >> TS_2]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP does not send the short message to any SMSC server.	
Comments:	NOTE: The two list change indications above may form part of one {FACILITY} message.	

TC_FT_NG1.N.24_BV_307	Outgoing SMS List - Network side SMS encoding set to GSM 7 bit with national variants
Test purpose:	Test that the FP accepts a Network side SMS character encoding set to GSM 7 bit with national variants
Reference:	TS 102 527-5 [15], clause 7.4.35.3
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The SMS service for line 0 has the following settings: Line id = 0, Enable SMS = 30H, Max SMS Size = A0H, SMSC Send Server = 00441234567890, SMSC Receive Server = 00441234560987, SMS Delivery Report = 31H, SMS Validity Period = A7H, Allowed SMS character encodings and variants = (value='TS 123 038 / GSM 7 bit', variants=(Portuguese, Urdu))=(01H, (3H, 13H)) IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, List id = SMS Settings List> a2 [IUT >> TS_1] <**Start session confirm**, List id = SMS Settings List session id = A> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, with the following field ids: List entry field id 1 = 'SMS service id' List entry field id 2 = 'Line id' List entry field id 3 = Enable SMS List entry field id 4 = Max SMS size List entry field id 5 = 'SMSC Send Server' List entry field id 6 = 'SMSC Receive Server'> List entry field id 7 = SMS delivery report List entry field id 8 = SMS validity period List entry field id 9 = Allowed SMS character encodings and variants a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index= 1, Partial delivery/Counter = 1> a3.2 [IUT >> TS_1] a series of <**data packet/data packet last**>'s with the content of the requested fields for line 0 as specified in the initial conditions. s4 [TS_1 >> IUT] <**End session**, session id = A> a4 [IUT >> TS_1] <**End session confirm**, session id = A> s5 [TS_1 >> IUT] <**Start session**, list id = Outgoing SMS List> a5 [IUT >> TS_1] <**Start session confirm**, list id = Outgoing SMS List session id = A> s6.1 [TS_1 >> IUT] <**Save entry**, session id = A, entry id = 0 (new entry)> s6.2 [TS_1 >> IUT] <**Data packet/data packet last**', session id = A, entry id = E, Entry field identifier 1 of 'Number' set to +441311234567 Entry field identifier 2 of 'Name' set to 'Fernão do Pó' Entry field identifier 3 of 'SMS service id' set to 0, Entry field identifier 4 of 'Network side SMS encoding' set to 'Encoding value = 1 (TS 123 038/GSM 7 bit), Variant 1 = 3 (Portuguese Locking), Variant 2 = 13H (Urdu Shift)> Entry field identifier 5 of 'SMS size' set to 38 Entry field identifier 6 of 'SMS content' with encoded string 'A pressa é inimiga da perfeição. $123'. a6.1 [IUT >> TS_1] <**Save entry confirm**, session id = A, entry id = E> a6.2 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = F, position indicator=0 - IE <<Events notification>> with: - event type/subtype of 'List change indication'/Sent SMS List - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0) s7 [TS_1 >> IUT] <**End session**, session id = A> a7 [IUT >> TS_1] <**End session confirm**, session id = A>

	s8 [TS_1 >> IUT] {**CC-RELEASE**} message a8 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. In a6.2, verify that the FP sends the SMS to the SMSC with a network side encoding of TS 123 038/GSM 7 bit using the Portuguese Locking shift table and that the $ character is encoded using the Urdu Single shift table (as '1B02'H where 1BH is the escape character).
Comments:	In s3, the used command could be a search entries. In s5, the Start session command shall be sent within LiA maintain timer minimum value (i.e. 1 second) otherwise the DECT link could be released by IUT. In s6.2, the $ character is encoded using the Urdu Single shift table (as '1B02'H where 1BH is the escape character), while the other characters are encoded using the Portuguese Locking shift table.

TC_FT_NG1.N.24_BV_308	Outgoing SMS List - Network side SMS encoding set to UCS-2	
Test purpose:	Test that the FP accepts a Network side SMS character encoding set to UCS-2	
Reference:	TS 102 527-5 [15], clause 7.4.35.3	
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The SMS service for line 0 has the following settings: Line id = 0, Enable SMS = 30H, Max SMS Size = A0H, SMSC Send Server = 00441234567890, SMSC Receive Server = 00441234560987, SMS Delivery Report = 31H, SMS Validity Period = A7H, Allowed SMS character encodings and variants = (value='TS 123 038 / UCS-2', variants=∅)=(3H) IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, List id = SMS Settings List>
	a2 [IUT >> TS_1]	<**Start session confirm**, List id = SMS Settings List session id = A>
	s3 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, with the following field ids: List entry field identifier 1 = 'SMS service id' List entry field identifier 2 = 'Line id' List entry field identifier 3 = Enable SMS List entry field identifier 4 = Max SMS size List entry field identifier 5 = 'SMSC Send Server' List entry field identifier 6 = 'SMSC Receive Server'> List entry field identifier 7 = SMS delivery report List entry field identifier 8 = SMS validity period List entry field identifier 9 = Allowed SMS character encodings and variants
	a3.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, start index= 1, Partial delivery/Counter = 1>
	a3.2 [IUT >> TS_1]	a series of <**data packet/data packet last**>'s with the content of the requested fields for line 0 as specified in the initial conditions.
	s4 [TS_1 >> IUT]	<**End session**, session id = A>
	a4 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s5 [TS_1 >> IUT]	<**Start session**, list id = Outgoing SMS List>
	a5 [IUT >> TS_1]	<**Start session confirm**, list id = Outgoing SMS List session id = A>
	s6.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s6.2 [TS_1 >> IUT]	<**data packet/data packet last**', session id = A Entry field id 1 of 'Number' set to +441311234567 Entry field id 2 of 'Name' set to 'László' Entry field id 3 of 'SMS service id' set to 0, Entry field id 4 of 'Network side SMS encoding' set to Encoding value = 3 (UCS-2)> Entry field id 5 of 'SMS size' set to 128 Entry field id 6 of SMS content with UCS-2 encoded string "The Odyssey by Homer starts '□νδρα μοι □ννεπε, μο□σα, πολ□τροπον, □ς μ□λα πολλ□'".
	a6.1 [IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = E>
	a6.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = F, position indicator=0 - IE <<Events notification>> with: - Event type/subtype of 'List change indication'/Sent SMS List - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>

	s8 [TS_1 >> IUT] {**CC-RELEASE**} message a8 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP sends the SMS to the SMSC with a network side encoding of UCS-2.
Comments:	In s3, the used command could be a search entries. In s5, the Start session command shall be sent within a second otherwise the DECT link may be released. The text in s.6.2 is encoded as:' 0054006800650020004f00640079007300730065007900200062007900200048 006f006d00650072002000730074006100720074007300200027 1f0403bd03b4 03c103b1002003bc03bf03b900201f1403bd03bd03b503c003b5002c002003bc 03bf1fe603c303b1002c002003c003bf03bb1f7b03c403c103bf03c003bf03bd 002c00201f4303c2002003bc1f7103bb03b1002003c003bf03bb03bb1f700027'H Note that TS 102 527-5 [15] uses UCS-2, big-endian.

TC_FT_NG1.N.24_BV_309	Draft SMS List -- Translation request of an outgoing SMS local encoding
Test purpose:	Test that the FP allows a valid request for translation of SMS content
Reference:	TS 102 527-5 [15], clause 7.4.35.3
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The Draft SMS List is empty IUT is in F-00
Time sequence:	1- Create a short message in the Draft SMS List s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = Draft SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Draft SMS List, session id = A> s3 [TS_1 >> IUT] <**Query supported entry fields**, session id = A> a3 [IUT >> TS_1] <**Query supported entry fields confirm**, session id = A, number of editable entry fields = 08H, List entry field identifiers as follows: 01H Number, 02H Name 03H Date and Time 04H SMS service id 05H Sending request 06H Network side SMS encoding 07H SMS size 08H SMS content> s4.1 [TS_1 >> IUT] <**Save entry**, session id = A, entry id = 0 (new entry)> s4.2 [TS_1 >> IUT] <**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Number' set to '+441311234567' Entry field identifier 2 of 'Name' set to 'Noël Bérubé' Entry field identifier 4 of 'SMS service id' set to 0 Entry field identifier 5 of 'Sending request' set to 0, Entry field identifier 6 of 'Network side SMS encoding'=('Unknown','Unknown', 'Unknown') Entry field identifier 7 of 'SMS size' set to 151 Entry field identifier 8 of SMS content with the following UTF-8 encoded string 'Some of the characters from the GSM default alphabet: @£$¥èéùìòÇØøÅåΔ_ΦΓΛΩΠΨΣΘΞÆæßÉ!"#¤%&'()*+¡ÄÖÑÜ§¿äöñüà' a4.1 [IUT >> TS_1] <**Save entry confirm**, Session id = A, entry id = E> a4.2 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - addition, entry id E, position indicator=0 - IE <<Events notification>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0) s5 [TS_1 >> IUT] <**Edit entry** session id = A, entry id = E> a5 [IUT >> TS_1] <**Edit entry confirm**> 2- Request translation of the SMS into GSM 7bit default encoding s6.1 [TS_1 >> IUT] <**Save entry**, session id=A, entry id=E> s6.2 [TS_1 >> IUT] <**Data packet/data packet last**, session id = A, entry id = E, Entry field identifier 1 of 'Network side SMS encoding' set to ('TS 123 038 / GSM 7 bit', 'GSM-7bit default alphabet table', 'GSM-7bit default alphabet extension table')=(1,0,0) >, a6.1 [IUT >> TS_1] <**Save entry confirm**, session id = A, entry id = E> a6.2 [IUT >> TS_1] {**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - modification, entry id E, position indicator=0 - IE <<Events notification>> with: - event type/subtype of 'List change indication/Draft SMS List'

		- event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	s7 [TS_1 >> IUT]	<**End session**, session id = A>
	a7 [IUT >> TS_1]	<**End session confirm**, session id = A>
		3- Check the SMS was translated into GSM 7bit default encoding
	s8 [TS_1 >> IUT]	<**Start session**, list id = Draft SMS List>
	a8 [IUT >> TS_1]	<**Start session confirm**, list id = Draft SMS List, session id = B>
	s9 [TS_1 >> IUT]	<**Query supported entry fields**, session id = B>
	a9 [IUT >> TS_1]	<**Query supported entry fields confirm**, session id = B, number of editable entry fields = 07H, List entry field identifiers as follows: 01H Number 02H Name 03H Date and Time 04H SMS service id 05H Network side SMS encoding 06H SMS size 07H SMS content>
	s10 [TS_1 >> IUT]	<**Read entries**, session id = B, start index = 1, direction = 0 (forward), counter = 1, List entry field identifier 1 (Network side SMS encoding) List entry field identifier 2 (SMS size) List entry field identifier 3 (SMS Content) >
	a10.1[IUT >> TS_1]	<**Read entries confirm**, session id = B, start index= 1, partial delivery = 0, counter = 1>
	a10.2[IUT >> TS_1]	<**Data packet/data packet last**, session id = B, entry id = E, - Entry field id 1 of Network side SMS encoding set to (1,0,0) - Entry field id 2 of SMS size set to 108 - Entry field id 3 of SMS content with GSM 7bit default encoding of 'Some of the characters from the GSM default alphabet: @£$¥èéùìòÇØøÅåΔ_ΦΓΛΩΠΨΣΘΞÆæßÉ!"#¤%&'()*+¡Ä ÖÑÜ§¿äöñüà'
	s11 [TS_1 >> IUT]	<**Delete entry**, session id = B, entry id = E>
	a11 [IUT >> TS_1]	<**Delete entry confirm**, session id = B, Total number of available entries = 0>
	s12 [TS_1 >> IUT]	<**End session**, session id = B>
	a12 [IUT >> TS_1]	<**End session confirm**, session id = B>
	s13 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a13 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.	
Comments:	In s4.2, for the UTF-8 encoding of the string, see Comments of TC_FT_NG1.N.24_BV_105. The short message is assumed to have been sent successfully before the network timer (CC.NG.03) expired, so that NO notification is expected for addition/deletion of this SMS entry to/from the Outgoing SMS List. This test also checks that all possible fields in the Draft and Sent SMS Lists are supported by the IUT.	

TC_FT_NG1.N.24_BV_310	Draft SMS List - write entry (insertion)	
Test purpose:	Test the write entry insert operation by editing a short message 1- Open session and add new SMS with initial content ('pelt') 2- Test insertion at start (expected result: 'mispelt') 3- Test insertion in middle (expected result: 'misspelt') 4- Test insertion at end (expected result: 'misspelt?') 5- Remove the lock on the entry and check that SMS is NOT sent	
Reference:	TS 102 527-5 [15], clause 7.4.10.4.12.1	
Initial condition:	1 PP registered (TS_1) on IUT. There is one SMS service on line 0 with SMS service id 0. The Draft SMS List is empty IUT is in F-00	
Time sequence:		1- Open session and add new SMS with initial content ('pelt')
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Draft SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Draft SMS List, session id = A>
	s3.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s3.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field id 1 of 'Number' set to '+441311234003' Entry field id 2 of 'Name' set to 'Sergei Rachmaninov' Entry field id 3 of 'SMS service id' set to 0 Entry field id 4 of 'Sending request' set to 0, Entry field id 5 of 'Network side SMS encoding'='Unknown' Entry field id 6 of 'SMS size' set to 4 Entry field id 7 of SMS content with UTF-8 encoded string 'pelt'
	a3.1 [IUT >> TS_1]	<**Save entry confirm**, Session id = A, entry id = F>
	a3.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - addition, entry id F, position indicator=0 - IE <<Events notification>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0,0)
	s4 [TS_1 >> IUT]	<**Edit entry**, session id = A, entry id = F, List entry field id 1 = 8>
	a4 [IUT >> TS_1]	<**Edit entry confirm**, session id = A>
		2- Test insertion at start (expected result: 'mispelt')
	s5.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = F, Field identifier = 8, Byte range lower bound = 0, Byte range upper bound = 0>>
	s5.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'mis'
	a5 [IUT >> TS_1]	<**Write entry confirm**, Session id=A, entry id=F, Position index=1, Total number of Entries = 1>
	s6 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 2, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = F>
	a6.2 [IUT >> TS_1]	**<Data packet/data packet last**, session id = A, Data content = <Entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'mispelt'>>
		3- Test insertion in middle (expected result: 'misspelt')
	s7.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = F, Field identifier = 8, Byte range lower bound = 3, Byte range upper bound = 3>>
	s7.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 's'
	a7 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=F, Position index=1, Total number of Entries = 1>

	s8 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a8.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = F>
	a8.2 [IUT >> TS_1]	**<Data packet/data packet last**, session id = A, Data content = <Entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'misspelt'>>
		4- Test insertion at end (expected result: 'misspelt?')
	s9.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = F, Field identifier = 8, Byte range lower bound = 8, Byte range upper bound = 8>>
	s9.2 [TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string '?'
	a9 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=F, Position index=1, Total number of Entries = 1>
	s10 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a10.1[IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = F>
	a10.2[IUT >> TS_1]	**<Data packet/data packet last**, session id = A, Data content = <Entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'misspelt?'>>
		5- Remove the lock on the entry and check that SMS is NOT sent
	s11.1[TS_1 >> IUT]	<**Save entry**, session id = A, entry id = F>
	s11.2[TS_1 >> IUT]	<**Data packet/data packet last**, session id = A, entry id = F, Entry field identifier 2 of 'Sending request' set to 0
	a11.1[IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = F>
	s12 [TS_1 >> IUT]	<**End session**, session id = A>
	a12 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s13 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a13 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP does not send the short message to any SMSC server.	
Comments:		

TC_FT_NG1.N.24_BV_311	Draft SMS List - write entry (deletion)	
Test purpose:	Test the write entry delete operation by editing a short message: 1- Open session and add new SMS with initial content ('hamstrung') 2- Test deletion at start (expected result 'strung') 3- Test deletion in middle (expected result 'stung') 4- Test deletion at end (expected result 'stun') 5- Remove the lock on the entry and check that SMS is NOT sent	
Reference:	TS 102 527-5 [15], clause 7.4.10.4.12.1	
Initial condition:	1 PP registered (TS_1) There is one SMS service on line 0 with SMS service id 0. The Draft SMS List is empty IUT is in F-00	
Time sequence:		1- Open session and add new SMS with initial content ('hamstrung')
	s1 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a1 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s2 [TS_1 >> IUT]	<**Start session**, list id = Draft SMS List>
	a2 [IUT >> TS_1]	<**Start session confirm**, list id = Draft SMS List, session id = A>
	s3.1 [TS_1 >> IUT]	<**Save entry**, session id = A, entry id = 0 (new entry)>
	s3.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, Entry field identifier 1 of 'Number' set to '+441311234300' Entry field identifier 2 of 'Name' set to 'John Woo' Entry field identifier 3 of 'Date and Time' set to value '000000'B (=current time/date) Entry field identifier 4 of 'SMS service id' set to 0 Entry field identifier 5 of 'Sending request' set to 0, Entry field identifier 6 of 'Network side SMS encoding'='Unknown' Entry field identifier 7 of 'SMS size' set to 9 Entry field identifier 8 of SMS content with UTF-8 encoded string 'hamstrung'
	a3.1 [IUT >> TS_1]	<**Save entry confirm**, Session id = A, entry id = G>
	a3.2 [IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with: - originating PP = TS_1, - addition, entry id G, position indicator=0 - IE <<Events notification>> with: - event type/subtype of 'List change indication/Draft SMS List' - event multiplicity=1 - IE <<**Call information**>> with: - Service id/SMS service id/value=(3,0, 0)
	s4 [TS_1 >> IUT]	<**Edit entry**, session id=A, entry id=G, List entry field id 1 = 8>
	a4 [IUT >> TS_1]	<**Edit entry confirm**, session id = A>
		2- Test deletion at start (expected result 'strung')
	s5.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = G, Field identifier = 8, Byte range lower bound=0, Byte range upper bound=3>>
	s5.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id=A, entry id=F, Entry field identifier 1, Entry field length = 1 (empty field)>
	a5 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=G, Position index=1, Total number of Entries = 1>
	s6 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a6.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = G>
	a6.2 [IUT >> TS_1]	**<data packet/data packet last**, session id = A, Data content = <Entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'strung'>>
		3- Test deletion in middle (expected result 'stung')
	s7.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = G, Field identifier = 8, Byte range lower bound=2,

		Byte range upper bound=3>>
	s7.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = G, Entry field length = 1 (empty string)>
	a7 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=G, Position index=1, Total number of Entries = 1>
	s8 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a8.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = G>
	a8.2 [IUT >> TS_1]	**<data packet/data packet last**, session id = A, Data content = <Entry id = G, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'stung'>>
		4- Test deletion at end (expected result 'stun')
	s9.1 [TS_1 >> IUT]	<**Write entry** session id = A, Write type = 1, Write description = <Entry identifier = G, Field identifier = 8, Byte range lower bound=4, Byte range upper bound=5>>
	s9.2 [TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = G, Entry field length = 1 (empty string)>
	a9 [IUT >> TS_1]	<**Write entry confirm**, session id=A, entry id=G, Position index=1, Total number of Entries=1>
	s10 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content) >
	a10.1[IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = G>
	a10.2[IUT >> TS_1]	**<data packet/data packet last**, session id = A, Data content = <Entry id = F, Entry field identifier 1 of 'SMS content' with UTF-8 encoded string 'stun'>>
		5- Remove the lock on the entry and check that SMS is NOT sent
	s11.1[TS_1 >> IUT]	<**Save entry**, session id = A, entry id = G>
	s11.2[TS_1 >> IUT]	<**data packet/data packet last**, session id = A, entry id = G, Entry field identifier 2 of 'Sending request' set to 0
	a11.1[IUT >> TS_1]	<**Save entry confirm**, session id = A, entry id = G>
	s12 [TS_1 >> IUT]	<**End session**, session id = A>
	a12 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s13 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a13 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. Verify that the FP does not send the short message to any SMSC server.	
Comments:		

TC_FT_NG1.N.24_BV_401	SMS Settings List -- Default SMS Settings
Test purpose:	Test that the FP defaults the SMS settings correctly
Reference:	TS 102 527-5 [15], clause 7.4.35.4.1
Initial condition:	1 PP registered (TS_1) The SMS Settings List has not been amended by the user. IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = SMS Settings List> a2 [IUT >> TS_1] <**Start session confirm**, list id = SMS Settings List session id = A> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 2, List entry field id 1 = 'SMS validity period'> a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, entry id = E> a3.2 [IUT >> TS_1] <**Data packet/data packet last**, session id = A, entry id = F, with for each entry (i.e. each SMS service) the standard defined default value for the requested field: - Entry field identifier 1 of SMS validity period = A7H> s4 [TS_1 >> IUT] <**End session**, session id = A> a4 [IUT >> TS_1] <**End session confirm**, session id = A> s5 [TS_1 >> IUT] {**CC-RELEASE**} message a5 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers.
Comments:	All other SMS settings fields are manufacturer defined (MD).

TC_FT_NG1.N.24_BV_601	Incoming SMS List - Notification of SMS Receipt from Network	
Test purpose:	Test that the FP notifies PPs of an incoming short message	
Reference:	TS 102 527-5 [15], clause 7.4.1.6	
Initial condition:	2 PPs registered (TS_1 and TS_2) both attached to line 0. TS_1 and TS_2 indicate 'Support of extended notifications'. There is one SMS service on line 0 with SMS service id 0. The Incoming SMS List has 2 existing entries for SMS service id 0. IUT is in F-00	
Time sequence:	s1 [IUT]	A 3rd short message is received on line 0 with the following attributes: Number +441311234568, Name 'Tester2', Date and time of '1530 22/5/2012', SMS service id = 0, SMS size = 116, SMS content = 'aAàÀâÂæÆbBcCçÇdDeEéÉèÈêÊëËfFgGhHiIîÎïÏjJkKlLmMnNoOôÔœŒpPqQrRsStTuUùÙûÛüÜvVwWxXyYÿŸzZ'
		Verify that the receipt is notified to both PPs
	a1 [IUT >> TS_1,2]	{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = 0, - addition, entry id E, position indicator=0 - IE <<**Events Notification**>> with: - event type/subtype = 'SMS message/New SMS message arrived', - event multiplicity ≥1 (nb of unread messages for SMS service id 0) and - event type/subtype = 'List change indication/Incoming SMS List', - event multiplicity ≥ 1 (total nb of SMS in the list for SMS service id 0) - IE <<**Call information**>> with: - identifier type/subtype = 'Service id/SMS service identifier', - identifier value = 0 (SMS service id 0)
		Verify the SMS content
	s2 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a2 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s3 [TS_1 >> IUT]	<**Start session**, List id = 'Incoming SMS List>
	a3 [IUT >> TS_1]	<**Start session confirm**, List id= Incoming SMS List session id = A>
	s4 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 3, direction = 0 (forward), counter = 1, List entry field identifier 1 = 01H (Number) List entry field identifier 2 = 02H (Name) List entry field identifier 3 = 03H (Date and Time) List entry field identifier 4 = 04H (Read status) List entry field identifier 5 = 05H (SMS service id) List entry field identifier 6 = 06H (SMS size) List entry field identifier 7 = 07H (SMS content) >
	a4.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = E>
	a4.2 [IUT >> TS_1]	<**Data packet/data packet last**, session id = A, entry id = E, List entry field identifier 1 = 01H, content = +441311234568, List entry field identifier 2 = 02H, content = 'Tester2', List entry field identifier 3 = 03H content = '1530 22/5/2012', List entry field identifier 4 = 04H content = unread, List entry field identifier 5 = 05H content = 0 (SMS service id) List entry field identifier 6 = 06H content = 116 (SMS size) List entry field identifier 7 = 07H, content as in stimulus s1
	s5 [TS_1 >> IUT]	<**End session**, session id = A>
	a5 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s6 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a6 [IUT >> TS_1]	{**CC-RELEASE-COM**} message

Pass criteria:	Verify all answers.
Comments:	SMS content encoding in the Incoming SMS List is always UTF-8. The UTF-8 encoding of SMS content in s1 is as follows: '6141c3a0c380c3a2c382c3a6c38662426343c3a7c38764446545c3a9c389c3a8 c388c3aac38ac3abc38b6646674768486949c3aec38ec3afc38f6a4a6b4b6c4c 6d4d6e4e6f4fc3b4c394c593c592705071517252735374547555c3b9c399c3bb c39bc3bcc39c7656775778587959c3bfc5b87a5a'H.

TC_FT_NG1.N.24_BV_602	Incoming SMS List - Deactivation notification
Test purpose:	Test that the FP notifies the PPs attached to a line when the Incoming SMS count drops to zero
Reference:	TS 102 527-5 [15], clause 7.4.1.6
Initial condition:	2 PPs registered (TS_1 and TS_2) both attached to line 0. TS_1 and TS_2 indicate 'Support of extended notifications'. There is one SMS service on line 0 with SMS service id 0. The Incoming SMS List has 2 (read) existing entries for SMS service id 0. IUT is in F-00
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message s2 [TS_1 >> IUT] <**Start session**, list id = Incoming SMS List> a2 [IUT >> TS_1] <**Start session confirm**, list id = Incoming SMS List, session id = A> s3 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1, direction = 0 (forward), counter = 3, List entry field id 1 = 07H (SMS content)> a3.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index = 1, counter = 2> a3.2 [IUT >> TS_1] series of <**Data packets/data packet last**>, one with entry id = E s4 [TS_1 >> IUT] <**Delete entry**, session id = A, entry id = E> a4 [IUT >> TS_1] <**Delete entry confirm**, session id = A, start index = 1, counter = 1> s5 [TS_1 >> IUT] <**Read entries**, session id = A, start index = 1,direction = 0 (forward), counter = 1, List entry field id 1 = 07H (SMS content)> a5.1 [IUT >> TS_1] <**Read entries confirm**, session id = A, start index = 1, counter = 1> a5.2 [IUT >> TS_1] <**Data packet/data packet last**, entry id = F> s6 [TS_1 >> IUT] <**Delete entry**, session id = A, entry id = F> a6.1 [IUT >> TS_1] <**Delete entry confirm**, session id = A, start index = 1, counter = 0> a6.2 [IUT >> TS_1,2] {**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = TS_1, - deletion, entry id E - deletion, entry id F - IE <<**Events Notification**>> with: - event type/subtype of 'SMS message/New SMS message arrived', - event multiplicity = 0 (nb of unread messages for SMS service id 0) and - event type/subtype of 'List change indication/Incoming SMS List', - event multiplicity=0 (total nb of SMS in the list for SMS service id 0) - IE <<**Call information**>> with: - identifier type/subtype of 'Service id/SMS service id id', - identifier value of 0 (SMS service id 0) Test that delete list on an empty list does not cause any notification s7 [TS_1 >> IUT] <**Delete list**, session id = A> a7 [IUT >> TS_1] <**Delete list confirm**, session id = A> s8 [TS_1 >> IUT] <**End session**, session id = A> a8 [IUT >> TS_1] <**End session confirm**, session id = A> s9 [TS_1 >> IUT] {**CC-RELEASE**} message a9 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers. In a7, verify that no notification is sent by IUT as a result of the 'delete list'.
Comments:	

TC_FT_NG1.N.24_BV_603	Incoming SMS List - SMS message notification update
Test purpose:	Test that the FP notifies the PPs attached to a line of the Incoming SMS count on location registration
Reference:	TS 102 527-5 [15], clause 7.4.1.6
Initial condition:	2 PPs registered (TS_1 and TS_2) and attached to the line 0. TS_1 and TS_2 indicate 'Support of extended notifications'. The Incoming SMS List has no existing entries. There are two SMS services both on line 0 (with identifiers s1 and s2) IUT is in F-00
Time sequence:	s1 [TS_2] Switch TS_2 off and then on a1.1 [IUT >> TS_2] {**FACILITY**} message containing: <<**Events Notification**>> IE with: - event type/subtype='SMS Message/No new SMS message arrived' - event multiplicity=0; - event type/subtype='List change indication/Incoming SMS List' - event multiplicity=0; and <<**Call information**>> IE with: - identifier type/subtype of 'Service identifier/SMS service id', - identifier value=s1 a1.2 [IUT >> TS_2] {**FACILITY**} message containing: <<**Events Notification**>> IE with: - event type/subtype='SMS Message/No new SMS message arrived' - event multiplicity=0 - event type/subtype="List change indication/Incoming SMS List' - event multiplicity=0; and <<**Call information**>> IE with: - identifier type/subtype='Service identifier/SMS service id' - identifier value=s2
Pass criteria:	Verify the answer.
Comments:	

TC_FT_NG1.N.24_BV_604	Incoming SMS List - Notification of SMS Receipt during voice call	
Test purpose:	Test that the FP notifies PPs of an incoming short message while a voice call is in progress on the same line	
Reference:	TS 102 527-5 [15], clause 7.4.1.6	
Initial condition:	2 PPs registered (TS_1 and TS_2) both attached to line 0. TS_1 and TS_2 indicate 'Support of extended notifications'. External call in F-10 (TS_2+IUT) initiated by TS_2 on line 0 (call id a) with Phone A Line 0 has "Multiple calls mode" set to 31H 'multiple calls mode' with no more than 2 simultaneous calls allowed. The Incoming SMS List has 2 existing entries for SMS service id 0.	
Time sequence:	s1 [IUT]	A short message is received on line 0 with the following attributes: - Number = +441311234569, - Name = 'Test604', - Date and time ='1315 13/8/2012', - SMS service id = 0, - SMS size = 116, - SMS content = 'aAàÀâÂæÆbBcCçÇdDeEéÉèÈêÊëËfFgGhHiIîÎïÏjJkKlLmMnNoOôÔœŒpPqQrRsStTuUùÙûÛüÜvVwWxXyYÿŸzZ'
	a1 [IUT >> TS_1,2]	{**FACILITY**} message containing: - IE <<**List change details**>> with: - originating PP = 0 - addition, entry id = E, position indicator=0 - IE <<**Events Notification**>> with: - event type/subtype = 'SMS message/New SMS message', - event multiplicity ≥ 1 (nb of unread messages for SMS service id 0) and - event type/subtype = 'List change indication/Incoming SMS List', - event multiplicity=3 (total nb of SMS in the list for SMS service id 0) - IE <<**Call information**>> with: - identifier type/subtype = 'Service id/SMS service identifier', - identifier value = 0 (SMS service id 0)
	s2 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE LiA >>
	a2 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s3 [TS_1 >> IUT]	<**Start session**, List id = 'Incoming SMS List>
	a3 [IUT >> TS_1]	<**Start session confirm**, List id= Incoming SMS List session id = A>
	s4 [TS_1 >> IUT]	<**Read entries**, session id = A, start index = 3, direction = 0 (forward), counter = 1, List entry field identifier 1 = 01H (Number) List entry field identifier 2 = 02H (Name) List entry field identifier 3 = 03H (Date and Time) List entry field identifier 4 = 04H (Read status) List entry field identifier 5 = 05H (SMS service id) List entry field identifier 6 = 06H (SMS size) List entry field identifier 7 = 07H (SMS content) >
	a4.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, entry id = E>
	a4.2 [IUT >> TS_1]	<**Data packet/data packet last**, session id = A, entry id = E, List entry field identifier 1 = 01H, content = +441311234569, List entry field identifier 2 = 02H, content = 'Test604', List entry field identifier 3 = 03H content = '1315 13/8/2012', List entry field identifier 4 = 04H content = unread, List entry field identifier 5 = 05H content = 0 (SMS service id) List entry field identifier 6 = 06H content = 116 (SMS size) List entry field identifier 7 = 07H, content as in stimulus s1
	s5 [TS_1 >> IUT]	<**End session**, session id = A>
	a5 [IUT >> TS_1]	<**End session confirm**, session id = A>
	s6 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a6 [IUT >> TS_1]	{**CC-RELEASE-COM**} message

Pass criteria:	Verify all answers.
Comments:	UTF-8 encoding of SMS content in s1 is as follows: '6141c3a0c380c3a2c382c3a6c38662426343c3a7c38764446545c3a9c389c3a8 c388c3aac38ac3abc38b6646674768486949c3aec38ec3afc38f6a4a6b4b6c4c 6d4d6e4e6f4fc3b4c394c593c592705071517252735374547555c3b9c399c3bb c39bc3bcc39c765675778587959c3bfc5b87a5a'H.

7.44 TC_FT_NG1.N.25 Digital Telephone Answering Machine (DTAM) Test Cases

TC_FT_NG1.N.25_BV_102	List of supported lists - DTAM related lists are present in the list of supported lists	
Test purpose:	Test that the FP supports DTAM lists	
Reference:	TS 102 527-5 [15], clauses 7.4.36.1.2 and 7.4.36.1.3	
Initial condition:	1 PP registered (TS_1) IUT is in F-00	
Time sequence:	s1 [TS_1 >> IUT]	<**Start session**, list id = 00H ('List of supported lists')>
	a1 [IUT >> TS_1]	<**Start session confirm**, list id = 00H, session id = A>
	s2 [TS_1 >> IUT]	<**Read entries**, session id = A, start index=1, direction=0 (forward), counter=1, List entry field id 1 = 01H ('List Identifiers')>
	a2.1 [IUT >> TS_1]	<**Read entries confirm**, session id = A, start index= 1, partial delivery=0, counter=1>
	a2.2 [IUT >> TS_1]	<**data packet/data packet last**>'s, with session id=A, data content with a single entry with single field 'List identifiers' containing at least: - 10H (DTAM Settings List) - (*optional*) 11H (DTAM Incoming Messages List) - 12H (DTAM Welcome Messages List)
	s3 [TS_1 >> IUT]	<**End session'**, session id=A>
	a3 [TS_1 >> IUT]	<**End session confirm**, session id=A>
	s4 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a4 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:		

TC_FT_NG1.N.25_BV_103	DTAM Settings List - Edit fields	
Test purpose:	Test that the FP successfully changes one or more editable fields in DTAM Settings List Reduce the value of the DTAM time out for next test TC_FT_NG1.N.25_BV_y3	
Reference:	TS 102 527-5 [15], clause 7.4.36.5.2	
Initial condition:	1 PP registered (TS_1) to IUT The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1 is always attached to line 0 only. e0 is the entry id for (D, line 0) association. If FT_IXIT_48=YES e1 is the entry id for (D, line 1) association. N = number of entries of IUT 'DTAM Settings List'	
Time sequence:	s1 [TS_1 >> IUT]	{CC-SETUP} message with IE <<BASIC-SERVICE **LiA** >>
	a1 [IUT >> TS_1]	{CC-CALL-PROC} message
	s2 [TS_1 >> IUT]	<**Start session**, List id = 10H denoting 'DTAM Settings List'>
	a2 [IUT >> TS_1]	<**Start session confirm**, List id=10H, session id=si, total number of available entries=N, discriminator type=0>
	s3 [TS_1 >> IUT]	<**Query supported entry fields**, List id= 10H, session id=si>
	a3 [IUT >> TS_1]	<**Query supported entry fields confirm**, session id=si>, with: - editable fields (at least): 01H 04H 09H - non-editable fields (at least): 02H - either editable or not: 03H 05H 06H 07H 08H
		for k= 0 and 1 (if FT_IXIT_48=YES*), OR for k=0 otherwise, perform s4 to a5*
	s4 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id = ek, entry fields=01H to 09H>
	a4 [IUT >> TS_1]	<**Edit entry confirm**, session id = si >, followed by <**data packet/data packet last**> containing the content of the requested fields
	s5 [TS_1 >> IUT]	TS_1 changes the values as follows for (D, line k) association: - (if FT_IXIT_51=YES) DTAM timeout (subfield of field 05H) -5 seconds - (if FT_IXIT_52=YES) DTAM web link (06H) - newdtam.example.com - (if FT_IXIT_53=YES) Welcome message parameters - Message index = 1 - (if FT_IXIT_54=YES) Screening timeout (subfield of 08H) - 10 seconds <**Save entry**, session id=si, entry id=ek> <**data packet/data packet last**, session id=si >
	a5 [IUT >> TS_1]	<**Save entry confirm**, session id=si, entry id=1, Position index=1, Total number of available entries=N>
	s6 [TS_1 >> IUT]	<**Read entries**, session id=si, start index=s, direction=d, (forward), counter=c ($0 \leq c \leq N$), list entry fields = 01H to 09H> with s,d,c chosen so that entries with entry id e0 (and e1 if any) are read.
	a6 [IUT >> TS_1]	<**Read entries confirm**, session id=si, start index=s, counter=c>, followed by <**data packet/data packet last**> containing the content modified as in s5
	s7 [TS_1 >> IUT]	<**End session**, session id=si>
	a7 [IUT >> TS_1]	<**End session confirm**, session id=si>
	s8 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a8 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	At a3, fields 04H, 08H, and 09H are not relevant for a remote DTAM. At s5, test is only used if at least one of the FT_IXIT value is used (see clause 5.4.3). At a6, TS_1 verifies that IUT returns same field values previously saved at a5.	

TC_FT_NG1.N.25_BV_104	DTAM Incoming Messages List - Create entries -- Check entries content	
Test purpose:	The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1 is always attached to line 0 only. Purpose of the test is to fill in the DTAM with messages, and if applicable, fill in the initially empty DTAM Incoming Messages List (with 2, 3 or 5 entries). 1- Create 1st entry in LI for line 0, Number=CLIP_A, Name= CNIP_A 2- Create 2nd entry in LI for line 0, Number=CLIP_A, Name= CNIP_A 3- If FT_IXIT_48=YES, create entry in LI for line 1, Number=CLIP_B, Name= CNIP_B 4- If FT_IXIT_47=YES, create (fully) missed call in LI for line 0, Nb=CLIP_A, Name= CNIP_A 5- If FT_IXIT_48=YES and if FT_IXIT_47=YES, create (fully) missed call in LI for line 1, Nb=CLIP_B, Name= CNIP_B 6- Check notification sending time (<CC.NG.02>) and notification format; sending time is only checked at the end of all calls (2, 3 or 5 calls) 7- Open new LiA session with LI and check new entries content	
Reference:	TS 102 527-3 [14], clause 7.4.10.5.6, TS 102 527-5 [15], clause 7.4.10.9.2.2	
Initial condition:	Date and Time of the system set 1 PP registered (TS_1 is NG PP1, IUT is NG FP) LI = 'DTAM Incoming Messages List'; LI is empty mD= FT_IXIT_47=YES if D manages (fully) missed calls, and NO otherwise. CLIP_B and Number_B are two (possibly equal) representations of Phone B number CLIP_A and Number_A are two (possibly equal) representations of Phone A number Contact list does not contain any entry with either Phone A or Phone B number (no matching possible) incoming_call_setup(*line*, *clip*, *cnip*, *call_id*)= {**CC-SETUP**} message with - <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - <<SIGNAL value= '41H' ('Alerting on - pattern 1')>> - <<CALLING PARTY NUMBER =<*clip*> >> - <<CALLING PARTY NAME =<Presentation allowed, UTF-8, Network provided, *cnip*> >> - <<CALL-INFORMATION>> with *(line*, line type info=(0,5,lt0), *call_id*, **CS call setup**) F-00	
Time sequence:		1- Create 1st entry in LI for line 0, Number=CLIP_A, Name= CNIP_A
	s1.1 [Ph A >> IUT]	Perform an incoming call on line 0 from Phone A
	s1.2 [USR >> TS_1]	Wait until DTAM D timeout for line 0 expires (do not pick up call)
	a1 [IUT]	DTAM D picks up the call
	s2.1 [Ph A >> IUT]	Sample message 1 recorded
		2- Create 2nd entry in LI for line 0, Number=CLIP_A, Name= CNIP_A
	s1.1 [Ph A >> IUT]	Perform again an incoming call on line 0 from Phone A
	s1.2 [USR >> TS_1]	Wait until DTAM D timeout for line 0 expires (do not pick up call)
	a1 [IUT]	DTAM D picks up the call
	s2.1 [Ph A >> IUT]	Sample message 2 recorded
		3- (if FT_IXIT_48=YES) Create entry in LI for line 1, Number=CLIP_B, Name= CNIP_B
	s2.2 [Ph B >> IUT]	Perform an incoming call on line 1 from Phone B
	s2.3 [USR >> TS_1]	Wait until DTAM D timeout for line 1 expires (do not pick up call)
	a2 [IUT]	DTAM D (associated with line 1) picks up the call
	s3.1 [Ph B >> IUT]	Sample message 3 recorded
		4- (if FT_IXIT_47=YES) Create missed call in LI for line 0, Nb=CLIP_A, Name= CNIP_A
	s3.2 [Ph A >> IUT]	Perform an incoming call on line 0 to make TS_1 and TS_2 ring
	a3.1 [IUT >> TS_1]	incoming_call_setup(line 0, CLIP_A, CNIP_A, call id a)
	a3.2 [IUT >> TS_2]	incoming_call_setup(line 0, CLIP_A, CNIP_A, call id b)
	s4.1 [TS_1,2 >> IUT]	{**CC-ALERTING**} message
	s4.2 [TS_1 >> USR]	*User invited to hang up on Phone A*
	s4.3 [USR >> Ph A]	Hang up
	s4.4 [D]	Sample message 4 is generated

		5- (if FT_IXIT_47=YES and FT_IXIT_48=YES) Create missed call in LI for line 1, Nb=CLIP_B, Name= CNIP_B
	s5 [Ph B >> IUT]	Perform an incoming call on line 1 to make TS_1 and TS_2 ring
	a5.1 [IUT >> TS_1]	incoming_call_setup(line 1, CLIP_B, CNIP_B, call id c)
	a5.2 [IUT >> TS_2]	incoming_call_setup(line 1, CLIP_B, CNIP_B, call id d)
	s6.1 [TS_1,2 >> IUT]	{**CC-ALERTING**} message
	s6.2 [TS_1 >> USR]	*User invited to hang up on Phone B*
	s6.3 [USR >> Ph B]	Hang up
	s6.4 [D]	Sample message 5 is generated
	a6 [IUT >> TS_1,2]	{**CC-RELEASE**} message
	s7.1 [TS_1,2 >> IUT]	{**CC-RELEASE-COM**} message
		6- Check notification sending time (<CC.NG.02>) and format
	s7.2 [TS_1]	Start timer <CC.NG.02>
	a7.1 [IUT >> TS_1]	(if tD='Visual' and *before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**List change details**>> - (addition, entry id = u1, position indicator = 0) - (addition, entry id = u2, position indicator = 0) - (addition, entry id = u4, position indicator = 0) - IE <<**Events Notification**>> with: - event type/subtype of 'Message Waiting/Voice' - event multiplicity= m1 message unread (and in total) for line 0 - event type/subt='List change ind./DTAM Incoming Messages List' - event multiplicity= m1 message in total for line 0 with m1=1 if mD=NO, or m1=2 if mD=YES - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid0
	a7.2 [IUT >> TS_1]	if (tD='Visual' and FT_IXIT_48=YES) *and before* <CC.NG.02>) {**FACILITY**} message with: - IE <<**List change details**>> - (addition, entry id = u3, position indicator = 0) - (addition, entry id = u5, position indicator = 0) - IE <<**Events Notification**>> with: - event type/subtype of 'Message Waiting/Voice' - event multiplicity= m2 message unread (and in total) for line 1 - event type/subt='List change ind./DTAM Incoming Messages List' - event multiplicity= m2 message in total for line 1 - IE <<**Call information**>> - id type/subt./val='Line id/Line id for external call/Line 0'=0/0/lid1 with m2=1 if mD=NO, or m2=2 if mD=YES
		7- Open new LiA session with LI and check new entries content
	s8 [TS_1 >> IUT]	{**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >>
	a8 [IUT >> TS_1]	{**CC-CALL-PROC**} message
	s9 [TS_1 >> IUT]	<**Start session**, List id =11H, nb of sorting fields =0>
	a9 [IUT >> TS_1]	<**Start session confirm**, session id=n, total nb=N, discriminator type=0 or 1, nb of sorting fields =1,sorting field id1 =4>
	s10 [TS_1 >> IUT]	<**Read selected entries**, session id=n, mark entries request= 00H, list entry field id 1..n = - 01H, DTAM full id - 05H, Read status - 02H, Number - 06H, Line name - 03H, Name - 07H, Line id - 04H, Date and Time - 08H, Time duration >
	a10 [IUT >> TS_1]	< **Read selected entries confirm**, session id=n> followed by <**data packet/data packet last**> with the following 5 entries in the given order (fields as in s10): - (u5, CLIP_B, CNIP_B, dt1, *unread*, FT_IXIT_38, (0,0,lid1), td1) - (u4, CLIP_A, CNIP_A, dt2, *unread*, FT_IXIT_28, (0,0,lid0), td2) - (u3, CLIP_B, CNIP_B, dt3, *unread*, FT_IXIT_38,(0,0,lid1), td3) - (u2, CLIP_A, CNIP_A, dt4, *unread*, FT_IXIT_28, (0,0,lid0), td4) - (u1, CLIP_A, CNIP_A, dt4, *unread*, FT_IXIT_28, (0,0,lid0), td5) where dt1 > dt2 > dt3 > dt4 > dt5 (ordering by recency)

	s11 [TS_1 >> IUT] <**End session**, session id=n> a11 [IUT >> TS_1] <**End session confirm**, session id=n> s12 [TS_1 >> IUT] {**CC-RELEASE**} a12 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all entries
Comments:	At s4.2, timer <CC.NG.02> is only triggered after all calls, instead of after each call as required by the standard (weakened test). At a7.1 (resp. a7.2) the list change details could be sent in several {FACILITY} messages (e.g. one for each call). - At a10, CLIP_B, CNIP_B in u3, u5 shall be the same values as used in steps 3,5 - At a10, CLIP_A, CNIP_A in u1, u2, u4 shall be the same values as used in steps 1,2,4 - At a10, FT_IXIT_28 and FT_IXIT_38 are the "Line name" field value of line 0 and line 1 respectively (see clause A.2.2)

TC_FT_NG1.N.25_BV_200(M)	DTAM consulting call with a DTAM using method M for managing incoming messages.
Test purpose:	The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1 is always attached to line 0 only. Access with method M (either Direct consulting call or following LiA session with 1C20H) is tested. This test is potentially usable for each DTAM implemented in the FP (Visual or Voice-Oriented). Attribute Local or remote only plays a role for setting up the call. 1- DTAM consulting call with DTAM D using method M 2-Testing DTAM commands scenario on incoming messages 3- Notifications for the modified DTAM Incoming Messages List 4-DTAM consulting call release
Reference:	TS 102 527-5 [15], clause 7.4.36.4 (DTAM commands)
Initial condition:	D = called DTAM D manages at least line 0; if FT_IXIT_48=YES, then D manages also line 1. Test TC_FT_NG1.N.25_BV_104 is used first in order to populate D with messages; Following that test, D contains at least 2 messages for line 0. mD = FT_IXIT_47 = YES if D manages (fully) missed calls. tD = FT_IXIT_45 = type of D (either 'Visual' or 'Voice-oriented') cD = call class required to call D ('Internal call setup' for a local DTAM, 'Normal call setup' for a remote DTAM) TS_1 is attached to line 0; if FT_IXIT_48=YES, then TS_1 is NOT attached to line 1. LI = concerned list (if any): *if* tD=Visual, LI = 'DTAM Incoming Call List' *else* LI=∅ (no list concerned, but test still applicable) (e1, … eN) is the ordered list of entry ids in the DTAM Incoming Messages List. - i∈[1..N], such that e_i=entry id for the 1st message in LI for (line 0, D) association - j∈[1..N], such that e_j=entry id for the last message in LI for (line 0, D) association The correspondence with the messages created in TC_FT_NG1.N.25_BV_104 is shown in the following table; values depend on FT_IXIT_47 and 48.

FT_IXIT_47	FT_IXIT_48	Number of messages in LI	N	List of messages in LI (note)	(i, j)
YES	YES	5	3	u5, u4, u3, u2, u1	(2,5)
YES	NO	3	3	u4, u2, u1	(1,3)
NO	YES	3	2	u3, u2, u1	(2,3)
NO	NO	2	2	u2, u1	(1,2)
NOTE: Message are numbered according to defined steps in TC_FT_NG1.N.25_BV_104. Entries for line 0 are underlined.					

id(*list*) = list identifier of *list*.
#(*list*) = total number of entries in *list*.
call_status(*call_id, call_status*) = {**CC-INFO**} message with IE <<CALL INFORMATION>> with call id = *call_id*, call status= *call_status*.

IUT is NG FP, TS_1 is NG PP1
T-00

Time sequence:

		1- DTAM consulting call with DTAM D using method M (*if* method M *is 'DIRECT_CONSULTING_CALL'*)
s1	[TS_1 >> IUT]	{**CC-SETUP**} message with IE <<**BASIC-SERVICE**>> with <Basic service>= 'DTAM wideband speech default setup attributes', <Call class> = cD
a1.1	[IUT >> TS_1]	{**CC-CONNECT**} message (*including call id assignment)* - IE <<CALL INFORMATION>> with call id a
a1.2	[IUT >> TS_1]	call_status(call id a, **CS call setup ack**)
s2	[TS_1 >> IUT]	{**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='∅' - IE <<CALL INFORMATION>> with call id a, line id='(0,line 0)'
a2.1	[IUT >> TS_1]	(*optional*) call_status(call id a, '**CS call proc'**)
a2.2	[IUT >> TS_1]	(*optional*) call_status(call id a, '**CS call alerting**')
a2.3	[IUT >> TS_1]	call_status(call id a, '**CS call connect**')
s3	[TS_1 >> IUT]	<**Start session**, list id = 11H ('DTAM Incoming Messages List')>
a3	[IUT >> TS_1]	<**Start session confirm**, list id=11H, session id=s>
		--- OR ---
		(*if* method M *is 'CONSULTING_CALL_FROM_LIA'*)
s4	[TS_1 >> IUT]	{**CC-SETUP**} message with IE <<**BASIC-SERVICE LiA**>>
a4	[IUT >> TS_1]	{**CC-CALL-PROC**} message
s5	[TS_1 >> IUT]	<**Start session**, list id = 11H ('DTAM Incoming Messages List')>
a5	[IUT >> TS_1]	<**Start session confirm**, list id=11H, session id=s>
s6	[TS_1 >> IUT]	{**CC-INFO**} message with: - IE <<MULTI-KEYPAD>> with keypad info='1C20'H + line 0>
a6.1	[IUT >> TS_1]	(*implicit basic service and call class change)* {**CC-CONNECT**} - IE <<CODEC-LIST>>
a6.2	[IUT >> TS_1]	(*including call id assignment*) call_status(call id a, '**CS call proc'**)
a6.3	[IUT >> TS_1]	(*optional*) call_status(call id a, '**CS call alerting**')
a6.4	[IUT >> TS_1]	call_status(call id a, '**CS call connect**')
a6.5	[TS_1]	(*from either a3 or a6.4 depending on method* M *used*) Values of N, i and j read from the list compared with those of the initial conditions.
s7	[TS_1 >> IUT]	<**Start DTAM session**, Line id=line 0>
a7	[IUT >> TS_1]	<**Start DTAM session confirm**, Line id=line 0, DTAM session id=dsi, discriminator type=0 or 1 >
		2 - Play and delete messages if tD = 'Visual', *Play message indicated with index* i
s8	[TS_1 >> IUT]	<**Play message**, type=Incoming, **play mode=0**, index=i>
a8.1	[IUT >> TS_1]	<**Play message confirm**>
a8.2	[IUT >> USR]	Message played was recorded in TC_FT_NG1.N.25_BV_104 and depends on FT_IXIT_47 & 48 values (see sub table above).
		else (if tD='Voice-oriented'), *Play the second message*
s9	[TS_1 >> IUT]	<**Select neighbour message**, select=next>
a9	[IUT >> TS_1]	<**Select neighbour message confirm**>
		(After 5 seconds) *Restart playing of message*
s10	[TS_1 >> IUT]	<**Play message**, type=Incoming, **play mode=1**>
a10	[IUT >> TS_1]	<**Play message confirm**>
		Pause playing of message
s11	[TS_1 >> IUT]	<**Pause/resume playing message**>
a11	[IUT >> TS_1]	<**Pause/resume message confirm**>
		Resume playing of message
s12	[TS_1 >> IUT]	<**Pause/resume playing message**>

	a12 [IUT >> TS_1]	<**Pause/resume message confirm**>
		if tD = 'Visual', *Delete another message (with index j) in list LI*
	s13 [TS_1 >> IUT]	<**Delete message**, type=Incoming, index=j>
	a13 [IUT >> TS_1]	<**Delete message confirm**> *OR* <**Negative acknowledgement** *command not implemented*>
		Stop playing of message
	s14 [TS_1 >> IUT]	<**Stop playing message**>
	a14 [IUT >> TS_1]	<**Stop playing message confirm**>
		Delete current message
	s15 [TS_1 >> IUT]	if tD = 'Visual', <**Delete message**, type=Incoming, index= i> else <**Delete message**, type=Incoming, index=0>
	a15.1[IUT >> TS_1]	<**Delete message confirm**>
	a15.2[IUT >> TS_1]	if tD = 'Voice-oriented', deletion is confirmed vocally to the user
		3- (if tD='Visual') Notifications for the modified LI list
	a15.3[IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with originating PP = 0, - (if *succeeded*) deletion, entry id=e_j - deletion, entry id=e_i - IE <<**Events notification**>> with: - event type/subtype of 'Message Waiting/Voice' - event multiplicity= n message unread (and in total) for line 0 - event type/subt.of 'List change ind./DTAM Incoming Messages List ' - event multiplicity= n message in total for line 0; with n=N-2 (or n=N-1 if parallel deletion fails) - IE <<**Call information**>> - identifier type/subytpe='Line id/Line id for external call'=0/0, - identifier value = line 0
	a15.4[IUT >> TS_1]	if tD = 'Visual', deletion is visible in the MMI
		4-DTAM consulting call release
	s16 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a16 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	IUT is assumed in the description above to use an early {CC-CONNECT} implementation. However it is allowed to use a non-early one. At s13, TS_1 attempts to delete a message while another one is played. This may fail or succeed but in any case IUT has to sustain the attempt. At a15.3, the read message was deleted. So that the total number of messages is equal to the number of unread message. At a15.3, there is no notification for the missed call list and the all calls list, because deletions in both lists of related entries are decorrelated.	

TC_FT_NG1.N.25_BV_201	DTAM consulting call with a DTAM using direct access for managing incoming messages.
Test purpose and body:	See test TC_FT_NG1.N.25_BV_200 (M=DIRECT_CONSULTING_CALL)

TC_FT_NG1.N.25_BV_202	DTAM consulting call with a DTAM using prior LiA session for managing incoming messages.
Test purpose and body:	See test TC_FT_NG1.N.25_BV_200(M=CONSULTING_CALL_FROM_LIA)

TC_FT_NG1.N.25_BV_300(M)	DTAM consulting call with a DTAM using method M for managing welcome messages.
Test purpose:	The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1 is always attached to line 0 only. Access with method M (either Direct consulting call or following LiA session with 1C20H) is tested. This test is potentially usable for each DTAM implemented in the FP (Visual or Voice-Oriented). Attribute Local or remote only plays a role for setting up the call. 1- DTAM consulting call with DTAM D using method M 2- Create two sample welcome messages on IUT for DTAM D (use of welcome message specific DTAM commands) 3-Testing DTAM commands scenario on welcome messages 4- Notifications for the modified Welcome Message List 5-DTAM consulting call release
Reference:	TS 102 527-5 [15], clause 7.4.36.4 (DTAM commands)
Initial condition:	D = called DTAM cD = call class required to call D ('Internal call setup' for a local DTAM, 'Normal call setup' for a remote DTAM) FT_IXIT_50 = max duration of a welcome message on D LI = concerned list = 'Welcome Message List' (e1, … eN) is the ordered sequence of entry ids in the Welcome Message List - i∈[1..N], such that e_i=entry id of the first welcome message position in LI for D - j∈[1..N], such that e_j=entry id of the last welcome message position in LI for D If FT_IXIT_49=YES (DTAM supports more than one Welcome Message) then j > i; else i=j. id(*list*) = list identifier of *list*. #(*list*) = total number of entries in *list*. call_status(*call_id, call_status*) = {**CC-INFO**} message with IE <<CALL INFORMATION>> with call id = *call_id*, call status= *call_status*. IUT is NG FP, TS_1 is NG PP1 T-00
Time sequence:	1- DTAM consulting call with DTAM D using method M (*if* method M *is 'DIRECT_CONSULTING_CALL'*) s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<**BASIC-SERVICE**>> with <Basic service>= 'DTAM wideband speech default setup attributes', <Call class> = cD a1.1 [IUT >> TS_1] {**CC-CONNECT**} message (*including call id assignment)* - IE <<CALL INFORMATION>> with call id a a1.2 [IUT >> TS_1] call_status(call id a, **CS call setup ack**) s2 [TS_1 >> IUT] {**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='∅' - IE <<CALL INFORMATION>> with call id a, line id='(0,lid0)' a2.1 [IUT >> TS_1] (*optional*) call_status(call id a, '**CS call proc'**) a2.2 [IUT >> TS_1] (*optional*) call_status(call id a, '**CS call alerting**') a2.3 [IUT >> TS_1] call_status(call id a, '**CS call connect**') s3 [TS_1 >> IUT] <**Start session**, list id = 12H ('Welcome Messages List')> a3 [IUT >> TS_1] <**Start session confirm**, list id=12H, session id=s> --- OR --- (*if* method M *is 'CONSULTING_CALL_FROM_LIA'*) s4 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<**BASIC-SERVICE LiA**>> a4 [IUT >> TS_1] {**CC-CALL-PROC**} message s5 [TS_1 >> IUT] <**Start session**, list id = 12H ('Welcome Messages List')> a5 [IUT >> TS_1] <**Start session confirm**, list id=12H, session id=s> s6 [TS_1 >> IUT] {**CC-INFO**} message - IE <<MULTI-KEYPAD>> with keypad info='1C20'H + lid0> a6.1 [IUT >> TS_1] (*implicit basic service and call class change)* {**CC-CONNECT**}

		- IE <<CODEC-LIST>>
	a6.2 [IUT >> TS_1]	(*including call id assignment*) call_status(call id a, '**CS call proc**')
	a6.3 [IUT >> TS_1]	(*optional*) call_status(call id a, '**CS call alerting**')
	a6.4 [IUT >> TS_1]	call_status(call id a, '**CS call connect**')
	a6.5 [TS_1]	(*from either a3 or a6.4 depending on method* M *used*) Values of N, i and j read from the list compatible with those of the initial conditions.
	s7 [TS_1 >> IUT]	<**Start DTAM session**, Line id=lid0>
	a7 [IUT >> TS_1]	<**Start DTAM session confirm**, Line id=lid0, DTAM session id=dsi, discriminator type=0 or 1 >
		2 - *Record* two Welcome messages for D
	s8 [TS_1 >> IUT]	<**Record welcome message**, index=i>
	a8 [IUT >> TS_1]	<**Record welcome message confirm**>
	s9.1 [TS_1 >> IUT]	Sample welcome message of duration 0,75 × FT_IXIT_50 is played towards IUT
	s9.2 [TS_1 >> IUT]	<**Stop recording welcome message**>
	a9 [IUT >> TS_1]	<**Stop recording welcome message confirm**>
		Initiate recording of a too long welcome message at position j (if FT_IXIT_49=NO*, the previously recorded message is overriden)*
	s10 [TS_1 >> IUT]	<**Record welcome message**, index=j>
	a10 [IUT >> TS_1]	<**Record welcome message confirm**>
	s11 [TS_1 >> IUT]	Sample welcome message of duration 1,25 × FT_IXIT_50 is played towards IUT
	a11 [IUT >> TS_1]	<**DTAM status** value= '*Message maximum recording time was reached*'>
		3 - Play and delete messages *Play message indicated with index* i
	s12 [TS_1 >> IUT]	<**Play message**, type=Welcome, **play mode=0**, index=i>
	a12.1[IUT >> TS_1]	<**Play message confirm**>
	a12.2[IUT >> USR]	Message played is: - if FT_IXIT_49=YES*,* the message that was recorded in s7.1 - if FT_IXIT_49=NO, the message that was recorded in s9.
		(After 5 seconds) *Restart playing of message*
	s13 [TS_1 >> IUT]	<**Play message**, type= Welcome, **play mode=1**>
	a13 [IUT >> TS_1]	<**Play message confirm**>
		Pause playing of message
	s14 [TS_1 >> IUT]	<**Pause/resume playing message**>
	a14 [IUT >> TS_1]	<**Pause/resume message confirm**>
		Resume playing of message
	s15 [TS_1 >> IUT]	<**Pause/resume playing message**>
	a15 [IUT >> TS_1]	<**Pause/resume message confirm**>
		(if FT_IXIT_49=YES) *Delete another message (message with index j) in list LI*
	s16 [TS_1 >> IUT]	<**Delete message**, type= Welcome, index=j>
	a16 [IUT >> TS_1]	<**Delete message confirm**> *OR* <**Negative acknowledgement** *command not implemented*>
		Stop playing of message
	s17 [TS_1 >> IUT]	<**Stop playing message**>
	a17 [IUT >> TS_1]	<**Stop playing message confirm**>
		Delete message indicated with index i
	s18 [TS_1 >> IUT]	<**Delete message**, type= Welcome, index= i>
	a18.1[IUT >> TS_1]	<**Delete message confirm**>
		4- Notifications for the modified Welcome Messages List

	a18.2[IUT >> TS_1]	{**FACILITY**} message with: - IE <<**List change details**>> with originating PP = 0, - modification, entry id=e_i, pos. indicator= 0 if i=1or e_{i-1} if i>1 - modification, entry id=e_j, pos. indicator= 0 if j=1or e_{j-1} if j>1 - modification, entry id=e_i, pos. indicator= 0 if i=1or e_{i-1} if i>1 - IE <<**Events notification**>> with: - event type/subt. of 'List change ind./ Welcome Messages List' - event multiplicity > j message in total (for D and other DTAMs)
	a18.3[IUT >> USR]	First Message (and last message if different) in the Welcome Message List have a duration field set to 0 (empty messages).
		5-DTAM consulting call release
	s19 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a19 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	IUT is assumed in the description above to use an early {CC-CONNECT} implementation. However it is allowed to use a non-early one. If FT_IXIT_49=YES (i≠j), TS_1 (although attached to line 0 only) is assumed to have access to all welcome message positions for DTAM D. At s16, TS_1 attempts to delete a message while another one is played. This may fail or succeed but in any case IUT has to sustain the attempt. At a18.2, the deletion of a message in the 'Welcome message List' does not delete the entry but only modifies the 'duration time' that becomes 0. At a18.2, the second modification notified merges the consecutive changes of s10/a10/s11 and s16/a16. It is therefore present even if the deletion of s16 is not used or fails.	

TC_FT_NG1.N.25_BV_301	DTAM consulting call with a DTAM using direct access for managing incoming messages.
Test purpose and body:	See test TC_FT_NG1.N.25_BV_300(M=DIRECT_CONSULTING_CALL)

TC_FT_NG1.N.25_BV_302	DTAM consulting call with a DTAM using prior LiA session for managing incoming messages.
Test purpose and body:	See test TC_FT_NG1.N.25_BV_300 (M= CONSULTING_CALL_FROM_LIA)

TC_FT_NG1.N.25_BV_400	DTAM Settings list - Validate current PIN code - Save New PIN code
Test purpose:	Test that the FP validates current PIN code and saves a new PIN code for local DTAM 1- Try changing the PIN without entering current PIN (Negative ack) 2- Enter wrong current PIN ('0000') 3- Enter correct current PIN ('p') 4- Change PIN successfully (from 'p' to '5678') 5- Check that new current PIN works
Reference:	TS 102 527-5 [15], clause 7.4.36.5.2
Initial condition:	1 PP registered (TS_1) to IUT IUT is preconfigured with the DTAM Settings list specified in annex B. s=session id used by IUT t=total number of entries in IUT DTAM Settings List p=current PIN of IUT (not equal to '0000', nor to '5678')
Time sequence:	s1 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a1 [IUT >> TS_1] {**CC-CALL-PROC**} message 1- Try changing the PIN without entering current PIN s2 [TS_1 >> IUT] <**Start session**, List id =10H ('DTAM Settings List') > a2 [IUT >> TS_1] <**Start session confirm**, List id=10H, session id=s, total number of available entries=t, discriminator type=0> s3 [TS_1 >> IUT] <**Query supported entry fields**, List id= 10H, session id=si> a3 [IUT >> TS_1] <**Query supported entry fields confirm**, session id=si>, with: - editable fields (at least): 01H 04H 09H - non-editable fields (at least): 02H - either editable or not: 03H 05H 06H 07H 08H s4 [TS_1 >> IUT] <**Edit entry,** session id s, entry id=1, field=09H> a4 [IUT >> TS_1] <**Edit entry confirm**, session id=s >, followed by <**data packet/data packet last**, session id=s> with local DTAM new PIN code field set to (FFH, FFH, FFH, FFH) > s5 [TS_1 >> IUT] <**Save entry**, session id=s, entry id=1>, followed by <**data packet/data packet last**, session id=2, with new PIN code set to '5678'> a5 [IUT >> TS_1] <**Negative acknowledgement**, session id=s, reject reason=0BH (PIN code required)> 2- Enter wrong current PIN s6 [TS_1 >> IUT] <**Edit entry,** session id=s, entry id=1, field=04H> a6 [IUT >> TS_1] <**Edit entry confirm**, session id = s>, followed by <**data packet/data packet last**> with local DTAM current PIN code field set to (FFH, FFH, FFH, FFH) > s7 [TS_1 >> IUT] <**Save entry**, session id=s, entry id=1>, followed by <**data packet/data packet last**, session id=s, with current PIN code set to '0000'> a7 [IUT >> TS_1] <**Negative acknowledgement**, session id=s, reject reason=0AH (invalid PIN)> 3- Enter correct current PINs8 [TS_1 >> IUT]<**Edit entry**, session id=s, entry id=1, field=04H> a8 [IUT >> TS_1] <**Edit entry confirm**, session id=s >, followed by <**data packet/data packet last**, session id=s> with local DTAM current PIN code field set to (FFH, FFH, FFH, FFH) s9 [TS_1 >> IUT] <**Save entry**, session id=s, entry id=1>, followed by <**data packet/data packet last**, session id=s>, with current PIN code set to p (see initial conditions) a9 [IUT >> TS_1] <**Save entry confirm**, session id=s, entry id=1, Position index=1, Total number of available entries=t> 4- Change PIN successfully s10 [TS_1 >> IUT] <**Edit entry**, session id=s, entry id=1, field=09H> a10 [IUT >> TS_1] <**Edit entry confirm**, session id=s>, followed by <**data packet/data packet last**> with local DTAM new PIN code field set to (FFH, FFH, FFH, FFH)

	s11 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id=1>, followed by <**data packet/data packet last**, session id=s>, with new PIN code set to '5678'
	a11 [IUT >> TS_1]	<**Save entry confirm**, session id=s, entry id=1, Position index=1, Total number of available entries=t>
		5- Check that new current PIN works
	s12 [TS_1 >> IUT]	<**Edit entry**, session id=s, entry id=1, field=04H>
	a12 [IUT >> TS_1]	<**Edit entry confirm**, session id=s >, followed by <**data packet/data packet last**, session id=s> with local DTAM current PIN code field set to (FFH, FFH, FFH, FFH) >
	s13 [TS_1 >> IUT]	<**Save entry**, session id=s, entry id=1>, followed by <**data packet/data packet last**, session id=s>, with current PIN code set to '5678'
	a13 [IUT >> TS_1]	<**Save entry confirm**, session id=s, entry id=1, Position index=1, Total number of available entries=t>
	s14 [TS_1 >> IUT]	<**End session**, session id=s>
	a14 [IUT >> TS_1]	<**End session confirm**, session id=s>
	s15 [TS_1 >> IUT]	{**CC-RELEASE**} message
	a15 [IUT >> TS_1]	{**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers	
Comments:	Implementation of PIN code is mandatory. identifier, number of non-editable entry fields, list entry fields >	

7.45 TC_FT_NG1.N.26 DTAM Screening Test Cases

TC_FT_NG1.N.26_BV_101	Call screening indication and release from FT	
Test purpose:	Test that FT sends call screening indication (CS screening setup) to the PT (set as screening PT for the used DTAM) and releases the call to PT after 'Screening acceptance timeout' 1-Incoming call from Phone A presented until DTAM timeout 2- Call screening indication sent from FP (IUT) 3- Release of the call after Screening acceptance timeout Test is used whether FT_IXIT_54 ('Multiple PPs screening') is 'Supported' or not	
Reference:	TS 102 527-5 [15], clauses 7.4.36.5.1.7, 7.4.36.6.2 and 7.4.36.6.6	
Initial condition:	IUT is NG FP, TS_1 is NG PP1 The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1 is always attached to line 0 only. TS_1 is set as screening PT for (D, line 0) association. IUT is set in single PP screening mode for (D, line 0) association. F-00	
Time sequence:		1-Incoming call from Phone A presented until DTAM timeout
	s1 [PhA >>IUT]	Perform incoming call on line 0 from Phone A
	a1 [IUT >> TS_1]	{**CC-SETUP**} message with: - IE <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, CS call setup)=<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2.1 [TS_1 >> IUT]	{**CC-ALERTING**}
	s2.2 [TS_1]	Wait until DTAM D timeout for line 0 expires (do not pick up call).
	a2.1 [IUT]	DTAM D picks the call.
		2- Call screening indication sent from FP (IUT)
	a2.2 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,FH)>
	s3.1 [PhA >> IUT]	Recording of message started

		3- Release of the call after Screening acceptance timeout
	s3.2 [TS_1]	Waiting for 'Screening acceptance timeout' (do not accept call screening)
	a3 [IUT >> TS_1]	(*after Screening acceptance timeout*) **{CC_RELEASE}**
	s4 [TS_1 >> IUT]	**{CC_RELEASE-COM}**
Pass criteria:	Verify all answers	
Comments:	In this version of the present document, only the single PP screening mode is tested.	

TC_FT_NG1.N.26_BV_102	Call Screening Acceptance and Interception with DTAM	
Test purpose:	Test that FT can handle call screening accept and intercept requests from PT for the line managed by DTAM (of any type) called D 1-Incoming call from Phone A presented until DTAM timeout 2- Call screening indication sent from FP (IUT) to both PPs 3-TS_1 accepts the call screening before the screening timeout 4-IUT releases the call with TS_2 after acceptance by TS_1 5-TS_1 intercepts the call after a few seconds 6-TS_1 releases call with Phone A Test is used whether FT_IXIT_54 ('Multiple PPs screening') is 'Supported' or not.	
Reference:	TS 102 527-5 [15], clauses 7.4.36.6.2, 7.4.36.6.3, 7.4.36.6.5 and 7.4.36.6.10	
Initial condition:	IUT is NG FP. TS_1 is NG PP1, TS_2 is NG PP2 and both support call screening The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1,TS_2 are attached to line 0. TS_1, TS_2 are set as screening PTs for (D, line 0) association. IUT is set in single PP screening mode for (D, line 0) association. F-00	
Time sequence:		1-Incoming call from Phone A presented until DTAM timeout
	s1 [PhA >>IUT]	Perform incoming call on line 0 from Phone A
	a1 [IUT >> TS_1,2]	{**CC-SETUP**} message with: - IE <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, CS call setup)=<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2.1 [TS_1,2 >> IUT]	{**CC-ALERTING**}
	s2.2 [TS_1,2]	Wait until DTAM D timeout for line 0 expires (do not pick up call).
	a2.1 [IUT]	DTAM D picks the call.
		2- Call screening indication sent from FP (IUT) to both PPs
	a2.2 [IUT >> TS_1,2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type info, call id a, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,FH)>
	s3.1 [PhA >> IUT]	Recording of message started
		3-TS_1 accepts the call screening before the screening acceptance timeout
	s3.2 [TS_1 >> IUT]	**{CC-INFO}** with: - IE<<MULTI-KEYPAD>> set to '1C 48'H (call screening accept) - IE <<CALL-INFORMATION>> with call id a
	a3.1 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id b, CS screening connect)=<(1, 0, value b), (2, 1, 10H)>
		4-IUT releases the call with TS_2 after acceptance by TS_1
	a3.2 [IUT >> TS_2]	{**CC-RELEASE**}
	s4.1 [TS_2 >> IUT]	{**CC-RELEASE-COM**}
		5-TS_1 intercepts the call after a few seconds
	s4.2 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<MULTI-KEYPAD>> set to '1C 49'H (call screening intercept) - IE <<CALL-INFORMATION>> with call id a
	a4.1 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type info, call id a, CS call connect) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,5)>
	a4.2 [TS_1 <> Ph A]	End to end U-plane connection
		6- TS_1 releases call with Phone A
	s5 [TS_1 >> IUT]	**{CC-RELEASE}**
	a5 [IUT >> TS_1]	**{CC-RELEASE-COM}**
Pass criteria:	Verify all answers Verify that PP can listen to screening call on call screening accept Verify 2-way audio when screening call is intercepted	
Comments:	In this version of the present document, only the single PP screening mode is tested.	

TC_FT_NG1.N.26_BV_201	Parallel call screening rejection	
Test purpose:	Test that FT can handle parallel call screening rejection from PT 1-Internal call already established between TS_1 and TS_2 2-Incoming call from Phone A presented until DTAM timeout 3- Call screening indication sent from FP (IUT) to both PPs 4-TS_1 rejects call screening 5-TS_2 accepts call screening before screening timeout Test is used whether FT_IXIT_54 ('Multiple PPs screening') is 'Supported' or not.	
Reference:	TS 102 527-5 [15], clauses 7.4.36.6.2 and 7.4.36.6.4	
Initial condition:	IUT is NG FP. TS_1 is NG PP1, TS_2 is NG PP2 and both support call screening The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1,TS_2 are both attached to line 0 only. TS_1, TS_2 are both set as screening PTs for (D, line 0) association. IUT is set in single PP screening mode for (D, line 0) association. F-10	
Time sequence:		1-Internal call already established between TS_1 and TS_2
	s1.1 [TS_1 <> TS_2]	Internal call active with call id a
		2-Incoming call from Phone A presented until DTAM timeout
	s1.2 [PhA >> IUT]	Incoming call on line 0 from Phone A
	a1 [IUT >> TS_1,2]	(In one or several messages) {**CC-INFO**} message(s) with: - (Optional) IE <<SIGNAL>> with value 07H indicating 'Call waiting tone on' - IE <<CALLING PARTY NUMBER <CLIP_A number> >> - (Optional) IE <<CALLING_PARTY NAME <CNIP_A> >> - IE <<CALL-INFORMATION>> with (line 0, line type info, call id b, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value b), (2, 1, 1)>
	s2 [TS_1,TS_2]	Wait until DTAM D timeout for line 0 expires (do not pick up call).
	a2.1 [IUT]	DTAM D picks the call.
		3- Call screening indication sent from FP (IUT) to both PPs
	a2.2 [IUT >> TS_1,2]	{**CC-INFO**} with: - IE <<CALL-INFORMATION>> with (line 0, line type information, call id b, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value b), (2,1,FH)>
	s3.1 [PhA >> IUT]	Recording of message started
		4-TS_1 rejects call screening
	s3.2 [TS_1 >> IUT]	{**CC-INFO**} with: - IE <<MULTI-KEYPAD>> set to '1C 36'H (call waiting rejection) - IE <<CALL-INFORMATION>> with call id b
	a3 [IUT >> TS_1]	{**CC-INFO**} with: - IE <<CALL-INFORMATION>> specifying (call id b, CS idle) = <(1, 0, value b), (2, 1,0)>
		5-TS_2 accepts call screening before screening timeout
	s4 [TS_2 >> IUT]	{CC-INFO} with: - IE <<MULTI-KEYPAD>> set to '1C 48'H (call screening accept) - IE <<CALL-INFORMATION>> with call id b
	a4.1 [IUT >> TS_2]	{**CC-INFO**} with: - IE <<CALL-INFORMATION>> specifying (call id a, CS call hold) =<(1, 0, value a), (2, 1, 9)>
	a4.2 [IUT >> TS_1]	{**CC-INFO**} with: - IE <<CALL-INFORMATION>> specifying (call id a, CS call remote hold)=<(1, 0, value a), (2, 1, DH)>
	a4.3 [IUT >> TS_2]	{**CC-INFO**} with: - IE <<CALL-INFORMATION>> specifying (call id b, CS screening connect)=<(1, 0, value b), (2, 1, 10H)>
	a4.4 [USR]	Screened call can be heard from TS_2, not from TS_1
Pass criteria:	Verify all answers Verify at a4.4, that TS_2 can listen to the screened call, and not TS_1	
Comments:	In this version of the present document, only the single PP screening mode is tested.	

TC_FT_NG1.N.26_BV_202	Accept screening of waiting call	
Test purpose:	Test that FP can present call screening for a waiting call and handle call screening accept from one PP for the line managed by DTAM (of any type) called D 1-Internal call already established between TS_1 and TS_2 2-Incoming call from Phone A presented until DTAM timeout 3- Call screening indication sent from FP (IUT) to both PPs 4-TS_1 accepts call screening before screening timeout 5- IUT releases the (screened) waiting call for TS_2 after acceptance by TS_1 6-TS_1 intercepts the call after a few seconds 7-TS_1 releases all calls Test is used whether FT_IXIT_54 ('Multiple PPs screening') is 'Supported' or not.	
Reference:	TS 102 527-5 [15], clause 7.4.36.6.8	
Initial condition:	IUT is NG FP. TS_1 is NG PP1, TS_2 is NG PP2 and both support call screening The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1,TS_2 are both attached to line 0 only. TS_1, TS_2 are both set as screening PTs for (D, line 0) association. IUT is set in single PP screening mode for (D, line 0) association. F-00	
Time sequence:		1-Internal call already established between TS_1 and TS_2
	s1.1 [TS_1 <> TS_2]	Internal call active with call id a
		2-Incoming call from Phone A presented until DTAM timeout
	s1.2 [PhA >> IUT]	Incoming call on line 0 from Phone A
	a1 [IUT >> TS_1,2]	*(In one or several messages)* {CC-INFO} message(s) with: - (Optional) IE <<SIGNAL>> with value 07H indicating 'Call waiting tone on' - IE <<CALLING PARTY NUMBER <CLIP_A number> >> - (Optional) IE <<CALLING_PARTY NAME <CNIP_A> >> - IE <<CALL-INFORMATION>> with (line 0, line type info call id b, CS call setup) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value b), (2, 1, 1)>
	s2 [TS_1,TS_2]	Wait until DTAM D timeout for line 0 expires (do not pick up call).
	a2.1 [IUT]	DTAM D picks the call.
		3- Call screening indication sent from FP (IUT) to both PPs
	a2.2 [IUT >> TS_1,2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type info, call id b, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value b), (2,1,FH)>
	s3.1 [PhA >> IUT]	Recording of message started
		4-TS_1 accepts call screening before screening timeout
	s3.2 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<MULTI-KEYPAD>> set to '1C 48'H (call screening accept) <<CALL-INFORMATION>> with call id b
	a3.1 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id a, CS call hold)=<(1, 0, value a), (2, 1, 9)>
	a3.2 [IUT >> TS_2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id a, CS call remote hold)=<(1, 0, value a), (2, 1, DH)>
	a3.3 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id b, CS screening connect)=<(1, 0, value b), (2, 1, 10H)>
		5- IUT releases the (screened) waiting call for TS_2 after acceptance by TS_1
	a3.4 [IUT >> TS_2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> specifying (call id b, CS idle) = <(1,0, value b), (2, 1,0)>
		6-TS_1 intercepts the call after a few seconds
	s4 [TS_1 >> IUT]	**{CC-INFO}** with: - IE <<MULTI-KEYPAD>> set to '1C 49'H (call screening intercept) - IE <<CALL-INFORMATION>> with call id b
	a4.1 [IUT >> TS_1]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type info, call id b,

		CS call connect) = <(0,0,lid0), (0,5,lt0), (1,0,value b), (2,1,5)>
	a4.2 [TS_1 <> Ph A]	End to end U-plane connection
		7- TS_1 releases all calls
	s5 [TS_1 >> IUT]	**{CC-RELEASE}**
	a5 [IUT >> TS_1]	**{CC-RELEASE-COM}**
Pass criteria:	Verify all answers Verify that TS_1, TS_2 can listen to screened call on call screening accept	
Comments:	In this version of the present document, only the single PP screening mode is tested.	

TC_FT_NG1.N.26_BV_301	Call interception after call screening timeout	
Test purpose:	Test that PP can intercept a screening call after call screening timeout on line 0 managed by the configured DTAM (of any type) called D. Test is used whether FT_IXIT_54 ('Multiple PPs screening') is 'Supported' or not.	
Reference:	TS 102 527-5 [15], clause 7.4.36.6.2	
Initial condition:	IUT is NG FP. TS_1 is NG PP1, TS_2 is NG PP2 and support call screening The test applies to IUT pre-configured to work with a DTAM (of any type) called D D manages at least line 0; if FT_IXIT_48=YES, D manages also line 1, but TS_1,TS_2 are attached to line 0. TS_1, TS_2 are both set as screening PTs for (D, line 0) association. IUT is set in single PP screening mode for (D, line 0) association. F-00	
Time sequence:	s1 [PhA >>IUT]	Perform incoming call on line 0 from Phone A
	a1 [IUT >> TS_1,2]	{**CC-SETUP**} message with: - IE <<BASIC-SERVICE >> with < Call class = 'Normal call setup' > - IE <<CALL-INFORMATION>> specifying (line 0, line type info, call id a, CS call setup)=<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 1)>
	s2.1 [TS_1,2 >> IUT]	{**CC-ALERTING**}
	s2.2 [TS_1,TS_2]	Wait until DTAM D timeout for line 0 expires (do not pick up call).
	a2.1 [IUT]	DTAM D picks the call.
	a2.2 [IUT >> TS_1,2]	**{CC-INFO}** with: - IE <<CALL-INFORMATION>> with (line 0, line type information, call id a, CS screening setup) = <(0,0,lid0), (0,5,lt0), (1,0,value a), (2,1,FH)>
	s3.1 [PhA >> IUT]	Start recording message
	s3.2 [TS_1,TS_2]	Wait for screening acceptance timeout
	a3 [IUT >> TS_1,2]	**{CC_RELEASE}**
	s4.1 [TS_1,TS_2]	**{CC_RELEASE_COM}**
		TS_1 goes offhook on line 0
	s4.2 [TS_1 >> IUT]	**{CC-SETUP}** message with: - IE <<**BASIC-SERVICE**>> <Call class> = <Normal call setup> - IE <<**CALL-INFORMATION**>> specifying (line 0) =<(0, 0, lid0)>
	a4.1 [IUT >> TS_1]	**{CC-CONNECT}** message with: - IE <<SIGNAL>> with the value 02H indicating 'Intercept tone on' - IE <<CALL-INFORMATION>> specifying (line 0, line type information, call id a, CS call connect) =<(0, 0, lid0), (0, 5, lt0), (1, 0, value a), (2, 1, 5)>
	a4.2 [IUT <> TS_1]	End to end U-plane connection
Pass criteria:	Verify all answers	
Comments:	In this version of the standard, only the single PP screening mode is tested.	

7.46 TC_FT_NG1.A.4 Base manual transmit power control Test Cases

TC_FT_NG1.A.4_BV_101	Base manual transmit power control - Setting of FP power level field - RSSI increase
Test purpose:	Verify that the FP (IUT) limits its transmitted power on the traffic bearer when the 'FP power level' field is set to 'Reduced power level'. 1- PP RSSI measured with 'Reduced power level' on FP side 2- PP RSSI measured with 'Normal power level' on FP side 3- RSSI increase computed
Reference:	TS 102 527-5 [15], clauses 7.4.11.3 and 7.10.3.1
Initial conditions:	
Time sequence:	1- PP RSSI measured with 'Reduced power level' on FP side s1.1 [TS1 >> IUT] Set 'FP power level' field to ('Reduced power level') using s5…a10 s1.2 [TS1 >> IUT] Outgoing G.722 call started towards Phone A s1.3 [Ph A] Call picked up s1.4 [TS_1] RSSI value of the received power on the traffic bearer measured and stored as RSSI_REDUCED_POWER a1 None s2 [TS_1 >> IUT] {**CC-RELEASE**} message a2 [IUT >> TS_1] {**CC-RELEASE-COM**} message 2- PP RSSI measured with 'Normal power level' on FP side s3.1 [TS_1 >> IUT] Set 'FP power level' field to ('Normal power level') using s5…a10 s3.2 [TS1 >> IUT] Outgoing G.722 call started towards Phone A s3.3 [Ph A] Call picked up s3.4 [TS_1] RSSI value of the received power on the traffic bearer measured and stored as RSSI_NORMAL_POWER 3- RSSI increase computed s3.5 [TS_1 >> USR] Both values RSSI_NORMAL_POWER and RSSI_REDUCED_POWER displayed a3 [TS1] Inequality RSSI_NORMAL_POWER ≥ RSSI_REDUCED_POWER + 6 dB holds as a result of RSSI value increase s4 [TS_1 >> IUT] {**CC-RELEASE**} message a4 [IUT >> TS_1] {**CC-RELEASE-COM**} message **End of test** **Reusable subtest** "Set 'FP Power level' to" (from s5 to a10) - with parameter:'power_level' s5 [TS_1 >> IUT] {**CC-SETUP**} message with IE <<BASIC-SERVICE **LiA** >> a5 [IUT >> TS_1] {**CC-CALL-PROC**} message s6 [TS_1 >> IUT] <**Start session**, List id = 07H, nb of sorting fields = 0, followed by sorting field 01H > a6 [IUT >> TS_1] <**Start session confirm**, session id=1, total nb=1, discriminator type=0> s7 [TS_1 >> IUT] <**Edit entry**, session id=1, entry id=1, field id 1..n=(at least): - 0EH ('FP power level') > a7 [IUT >> TS_1] <**Edit entry confirm**, session id=1> followed by <**data packet/data packet last**> with entry content (entry id = 1) s8 [TS_1 >> IUT] <**Save entry**, session id=1, entry id=1> followed by <**data packet/data packet last**> with (at least): - field 0EH set to 'power_level' a8 [IUT >> TS_1] <**Save entry confirm**, session id=1, entry id=1, position index=1, total number of available entries=1> s9 [TS_1 >> IUT] <**End session**, session id=1> a9 [IUT >> TS_1] <**End session confirm**, session id=1> s10 [TS_1 >> IUT] {**CC-RELEASE**} message a10 [IUT >> TS_1] {**CC-RELEASE-COM**} message
Pass criteria:	Verify all answers Verify all answers of the reusable subtest s5 … a10 each time it is used (twice)
Comments:	RSSI increase on PP side is assumed to reflect FP side transmit power increase (which is what the test is supposed to measure) because FP-PP distance is low

7.47 TC_FT_NG1.A.5 Handset adaptive transmit power control Test Cases

No test case.

Annex A (normative): Declarations on features and procedures supported

The information contained in the following tables is required for parameterization of the test cases referred to in the present document and has therefore to be taken into account to run an appropriate test suite against the IUT.

For each procedure noted in the following tables, the manufacturer shall declare if it is supported or not. When supported, the corresponding tests case(s) listed in "TC reference" column shall be performed.

Optional procedures are identified by a status "O".

Conditional procedures are identified by a status "C[status number]". A procedure can be conditional to a feature support and/or a procedure support and/or a requirement support.

A.1 Declarations for portable part

A.1.1 Optional or conditional PT features

This clause contains the optional features which can be declared by the manufacturer on the PT side and lists all optional, mandatory or conditional tests associated to these features.

Table A.1: Optional or conditional PT features supported

Feature no	Feature name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.11	Call deflection (internal or external)	7.4.4.2	O	TC_PT_NG1.N.11_BV_101 TC_PT_NG1.N.11_BV_201 TC_PT_NG1.N.11_BV_202 TC_PT_NG1.N.11_BV_203
NG1.N.21	Headset management	7.4.16	C10001	TC_PT_NG1.N.21_BV_101 TC_PT_NG1.N.21_BV_102 TC_PT_NG1.N.21_BV_201 TC_PT_NG1.N.21_BV_301 TC_PT_NG1.N.21_BV_401 TC_PT_NG1.N.21_BV_501 TC_PT_NG1.N.21_BV_601 TC_PT_NG1.N.21_BV_701
			C10002	TC_PT_NG1.N.21_BV_705
NG1.N.24	Short Message Service	7.4.35	O	TC_PT_NG1.N.16_BV_7002 TC_PT_NG1.N.16_BV_7003 TC_PT_NG1.N.16_BV_7004 TC_PT_NG1.N.16_BV_7005 TC_PT_NG1.N.16_BV_7006 TC_PT_NG1.N.16_BV_7101 TC_PT_NG1.N.16_BV_7102 TC_PT_NG1.N.16_BV_7202 TC_PT_NG1.N.16_BV_7301 TC_PT_NG1.N.16_BV_7302 TC_PT_NG1.N.16_BV_7303 TC_PT_NG1.N.16_BV_7304 TC_PT_NG1.N.16_BV_7401 TC_PT_NG1.N.24_BV_101 TC_PT_NG1.N.24_BV_201 TC_PT_NG1.N.24_BV_301 TC_PT_NG1.N.24_BV_302 TC_PT_NG1.N.24_BV_601 TC_PT_NG1.N.24_BV_602
NG1.N.25	Digital Telephone Answering Machine (DTAM)	7.4.36	O	TC_PT_NG1.N.25_BV_101 TC_PT_NG1.N.25_BV_102 TC_PT_NG1.N.25_BV_103 TC_PT_NG1.N.25_BV_104 TC_PT_NG1.N.25_BV_105 TC_PT_NG1.N.25_BV_201 TC_PT_NG1.N.25_BV_202 TC_PT_NG1.N.25_BV_301 TC_PT_NG1.N.25_BV_302 TC_PT_NG1.N.25_BV_303 TC_PT_NG1.N.25_BV_304 TC_PT_NG1.N.25_BV_400
NG1.N.26	Call Screening	7.4.36.6	O	TC_PT_NG1.N.25_BV_101 TC_PT_NG1.N.25_BV_201 TC_PT_NG1.N.25_BV_202 TC_PT_NG1.N.25_BV_301
C10001: IF the PT is a headset PP THEN "M" ELSE "I". C10002: This test case applies to a handset and not to a headset. IF the PT is not a headset PP THEN "O" ELSE "I".				

A.1.2 Extra information for PT testing

In addition to the optional features supported, the supplier shall declare additional information related to the PT implementation.

Table A.2: Implementation extra information for PT testing

Item no	Implementation extra information	Reference to TS 102 527-5 [15]	Possible values to be declared
PT_IXIT_1	Several contact numbers in Contact List	7.4.10.5.7 (see note)	Not supported
			Supported
PT_IXIT_2	CLIR code subfields	7.4.11.4.10	Non editable
			Editable
PT_IXIT_3	CFU code subfields	7.4.11.4.11	Non editable
			Editable
PT_IXIT_4	CFNA code subfields	7.4.11.4.12	Non editable
			Editable
PT_IXIT_5	CFB code subfields	7.4.11.4.13	Non editable
			Editable
PT_IXIT_6	Internal call codec priority	7.4.3.9.2	Not supported
			Supported
PT_IXIT_7	All Calls List	7.4.10.5.6	Not supported
			Supported
PT_IXIT_8	PT allows two simultaneous LiA sessions	7.4.10.1	Not supported
			Supported
PT_IXIT_9	PT Side Short Message Editing	7.4.35.3	Not supported
			Supported
PT_IXIT_11	PP uses All Calls List as data source for call logs	7.4.10.5.6 (see note 2,3)	YES
			NO
PT_IXIT_12	PT uses caching with the Missed Calls List	7.4.10.9	YES
			NO
PT_IXIT_13	PT uses caching with the Outgoing Calls List	7.4.10.9	YES
			NO
PT_IXIT_14	PT uses caching with the Incoming Accepted Calls List	7.4.10.9	YES
			NO
PT_IXIT_15	PT uses caching (and extended notification) with the All Calls List	7.4.10.9	YES
			NO
PT_IXIT_16	PT uses caching (and extended notification)with the Contact List	7.4.10.9	YES
			NO
PT_IXIT_17	PT uses caching with the Internal Names List	7.4.10.9	YES
			NO
PT_IXIT_18	PT uses caching with the DECT System Settings List	7.4.10.9	YES
			NO
PT_IXIT_19	PT uses caching with the Line Settings List	7.4.10.9	YES
			NO
PT_IXIT_20	PT uses caching with the All Incoming Calls List	7.4.10.9	YES
			NO

NOTE 1: This additional information also indicates that the PP is not able to display (and therefore to allow the user to edit) contacts other than the first one in any existing entry; furthermore, the user cannot create a contact with more than one (non-empty) contact number.
NOTE 2: IF PT_IXIT_11=NO THEN:
The Missed Calls List is used as data source for the Missed Calls Log
The Incoming Accepted Calls List is used as data source for the Incoming Accepted Calls Log
NOTE 3: IF PT_IXIT_11=YES THEN PT_IXIT_7 is "Supported" and the tests for the 'All Calls List' shall be run;
IF PT_IXIT_11=NO THEN PT_IXIT_7 may be "Supported" OR "Not supported", AND the tests for the 'Missed Calls list' and the 'All Incoming Calls List' shall be run.

A.1.3 Optional or conditional PT procedures

This clause contains the optional or conditional procedures which can be declared by the manufacturer on the PT side.

Table A.3: Date and Time synchronization procedure supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.5_1	PT initiated Date and Time synchronization	7.4.2.2	O	TC_PT_NG1.N.5_BV_102

Table A.4: Common parallel call procedures (external or internal) supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.7_7	Active call release with replacement (from PP to FP) - call waiting	7.4.3.5.12	O	TC_PT_NG1.N.7_BV_701
NG1.N.7_7	Active call release with replacement (from PP to FP) - call on-hold	7.4.3.5.12	O	TC_PT_NG1.N.7_BV_702
NG1.N.7_9	Putting a call on-hold	7.4.3.5.8	O	TC_PT_NG1.N.7_BV_901
NG1.N.7_10	Resuming a call put on-hold	7.4.3.5.9	O	TC_PT_NG1.N.7_BV_901

Table A.5: Intrusion call procedures supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.10_1	Implicit call intrusion into a line in "single call" mode	7.4.3.8.1	C11001	TC_PT_NG1.N.10_BV_101 TC_PT_NG1.N.10_BV_102 TC_PT_NG1.N.10_BV_103
NG1.N.10_2	Explicit call intrusion (from PP to FP)	7.4.3.8.2	C11001	TC_PT_NG1.N.10_BV_201 TC_PT_NG1.N.10_BV_202
NG1.N.10_3	Explicit handset intrusion	7.4.3.8.2 (see note)	C11002	TC_PT_NG1.N.10_BV_203
NG1.N.10_4	Explicit line intrusion	7.4.3.8.2 (see note)	C11002	TC_PT_NG1.N.10_BV_204
C11001: At least one of the two procedures shall be implemented C11002: IF NG1.N.10_2, THEN at least NG1.N.10_3 or NG1.N.10_4 shall be implemented				
NOTE: These procedures are not covered in a dedicated clause but are described in clause 7.4.3.8.2.				

Table A.6: DTAM feature procedures supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.25_4	'Voice-oriented' DTAM	7.4.36.2.1	C12001	TC_PT_NG1.N.25_BV_202 TC_PT_NG1.N.25_BV_303 TC_PT_NG1.N.25_BV_304
NG1.N.25_5	'Visual' DTAM	7.4.36.2.2	C12001	TC_PT_NG1.N.25_BV_201 TC_PT_NG1.N.25_BV_301 TC_PT_NG1.N.25_BV_302 TC_PT_NG1.N.25_BV_400
C12001: At least one of the two procedures NG1.N.25_4 OR NG1.N.25_5 shall be implemented.				

Table A.6b: Call Screening feature procedures supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.26_1	Call Screening support on PP side	7.4.36.6	O	TC_PT_NG1.N.26_BV_101
NG1.N.26_2	First call screening	7.4.36.6 (see note)	C13001	TC_PT_NG1.N.25_BV_201 TC_PT_NG1.N.25_BV_202
NG1.N.26_3	Parallel call screening	7.4.36.6.8	C13001	TC_PT_NG1.N.25_BV_301
C13001: If NG1.N.26_1, then NG1.N.26_2 and NG1.N.26_3 shall be implemented. NOTE: The procedure is not covered in a dedicated clause but is described in clauses 7.4.36.6.2 through 7.4.36.6.5.				

Table A.7: List access service procedures supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.16_2	List change notification	7.4.10.2	O	Not tested
NG1.N.16_4	Query supported entry fields	7.4.10.4.2	O	Not tested
NG1.N.16_16	List of Supported Lists	7.4.10.5.2	O	Not tested
NG1.N.16_18	Outgoing Calls List	7.4.10.5.4	O	TC_PT_NG1.N.16_BV_1801 TC_PT_NG1.N.16_BV_1802 TC_PT_NG1.N.16_BV_1803
NG1.N.16_20	All Calls List	7.4.10.5.6	C11609	TC_PT_NG1.N.16_BV_2004 TC_PT_NG1.N.16_BV_2005 TC_PT_NG1.N.16_BV_2006 TC_PT_NG1.N.16_BV_2008 TC_PT_NG1.N.16_BV_2009 TC_PT_NG1.N.16_BV_2010
NG1.N.16_21	Contact List	7.4.10.5.7	C11601	TC_PT_NG1.N.16_BV_2110
NG1.N.16_23	All Incoming Calls List	7.4.10.5.11	O	TC_PT_NG1.N.16_BV_2301 TC_PT_NG1.N.16_BV_2302 TC_PT_NG1.N.16_BV_2303
NG1.N.16_26	Virtual Contact List and call list per line	7.4.11.5	O	TC_PT_NG1.N.16_BV_2601 TC_PT_NG1.N.16_BV_2602 TC_PT_NG1.N.16_BV_2603 TC_PT_NG1.N.16_BV_2604 TC_PT_NG1.N.16_BV_2605 TC_PT_NG1.N.16_BV_2606
NG1.N.16_30	FP IP address / type	7.4.11.3.4	O	TC_PT_NG1.N.16_BV_3001
NG1.N.16_31	FP IP address / value	7.4.11.3.5	O	TC_PT_NG1.N.16_BV_3001
NG1.N.16_32	FP IP address / subnet mask	7.4.11.3.6	O	TC_PT_NG1.N.16_BV_3001
NG1.N.16_33	FP IP address / gateway	7.4.11.3.7	O	TC_PT_NG1.N.16_BV_3001
NG1.N.16_34	FP IP address / DNS server	7.4.11.3.8	O	TC_PT_NG1.N.16_BV_3001
NG1.N.16_37	FP version / Hardware version	7.4.11.3.11	O	TC_PT_NG1.N.16_BV_3501
NG1.N.16_41	Dialling prefix	7.4.11.4.4	O	TC_PT_NG1.N.16_BV_4101
NG1.N.16_42	FP melody	7.4.11.4.5	O	TC_PT_NG1.N.16_BV_4201
NG1.N.16_43	FP volume	7.4.11.4.6	O	TC_PT_NG1.N.16_BV_4301
NG1.N.16_44	Blocked number	7.4.11.4.7	O	TC_PT_NG1.N.16_BV_4401
NG1.N.16_46	Intrusion call	7.4.11.4.9	C11602	TC_PT_NG1.N.16_BV_4601
NG1.N.16_47	Permanent CLIR	7.4.11.4.10	C11603	TC_PT_NG1.N.16_BV_4701
			C11604	TC_PT_NG1.N.16_BV_4702
NG1.N.16_48	Call forwarding Unconditional	7.4.11.4.11	C11605	TC_PT_NG1.N.16_BV_4802
NG1.N.16_49	Call forwarding on No Answer	7.4.11.4.12	C11606	TC_PT_NG1.N.16_BV_4902
NG1.N.16_50	Call forwarding on Busy Subscriber	7.4.11.4.13	C11607	TC_PT_NG1.N.16_BV_5002
NG1.N.16_51	Emission mode	7.4.11.3.12	C11608	TC_PT_NG1.N.16_BV_5101

C11601: IF several contact numbers in Contact List is supported THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_1).
C11602: IF NG1.N.10 "Intrusion call" is supported THEN "M" ELSE "I".
C11603: IF NG1.N.17 "Calling line restriction" is supported THEN "M" ELSE "I".
C11604: IF NG1.N.17 "Calling line restriction" is supported AND CLIR code subfields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_2).
C11605: IF CFU code subfields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_3).
C11606: IF CFNA code subfields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_4).
C11607: IF CFB code subfields can be edited THEN "M" ELSE "N/A" (see Table A.2 PT_IXIT_5).
C11608: IF NG1.M.5 "no-emission mode" is supported THEN "M" ELSE "I".
C11609: EITHER the All Calls List OR the Missed Calls List and the Incoming Accepted Calls List shall be implemented and the corresponding tests shall be run (see Table A.2 PT_IXIT_11).

Table A.8: Tones provision procedures supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.20_2	Tones provision by the system - Dial-tone	7.4.15.2	O	TC_PT_NG1.N.20_BV_206
NG1.N.20_2	Tones provision by the system - Off-hook warning tone	7.4.15.2	O	TC_PT_NG1.N.20_BV_207
NG1.N.20_2	Tones provision by the system - Network congestion tone (external calls only)	7.4.15.2	O	TC_PT_NG1.N.20_BV_208

Table A.9: Headset management procedure supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.N.21_4	Re-dial of last outgoing call	7.4.16.4	O	TC_PT_NG1.N.21_BV_401
NG1.N.21_5	Re-dial of last incoming call	7.4.16.5	O	TC_PT_NG1.N.21_BV_501
NG1.N.21_6	Headset incoming call - G.726 call - Switching from headset to handset (headset initiated)	7.4.16.6	O	TC_PT_NG1.N.21_BV_601
NG1.N.21_7	Handset side - Headset call interception - G.722 call - Switching from headset to handset (handset initiated)	7.4.16.7	C12101	TC_PT_NG1.N.21_BV_705
C12101: This procedure applies to a handset and not a headset. IF the PT is a headset PP THEN "I" ELSE "O".				

Table A.10: Internal call codec priority procedure supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
GAP.N.31_6	Internal call codec priority	7.4.3.9	C33101	TC_PT_GAP.N.31_BV_601 TC_PT_GAP.N.31_BV_602
C33101: IF PP complies one of the exception cases to this procedure listed in clause 7.4.3.9.2 THEN "N/A" ELSE "M" (see Table PT_IXIT_6).				

Table A.11: Enhanced security procedures supported

Procedure no	Procedure name	Reference to EN 300 444 [12]	Status	TC reference
GAP.N.35_2	Re-keying during a call	8.45.2	O	TC_PT_GAP.N.35_BV_201 TC_PT_GAP.N.35_BV_202 TC_PT_GAP.N.35_BV_203
GAP.N.35_3	Storing the Derived Cipher Key (DCK)	8.45.3	O	TC_PT_GAP.N.35_BV_301 TC_PT_GAP.N.35_BV_302 TC_PT_GAP.N.35_BV_303 TC_PT_GAP.N.35_BV_304 TC_PT_GAP.N.35_BV_305 TC_PT_GAP.N.35_BV_306

Table A.12: Easy PIN code registration procedure supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.A.1_3	Base station name selection	7.10.1.3.2	O	TC_PT_NG1.A.1_BV_301

Table A.13: Easy pairing registration procedure supported

Procedure no	Procedure name	Reference to TS 102 527-5 [15]	Status	TC reference
NG1.A.2_5	Base station name selection	7.10.1.3.2	O	TC_PT_NG1.A.1_BV_301

A.1.4 PT relevant test cases list

According to the support of NG1.N.21 "Headset management" feature, the following configurations are possible:

- PT is a normal PT (not a headset portable part).
- PT is a headset portable part (i.e. "Support of the Headset management feature" capability bit in <<TERMINAL-CAPABILITY>> is set).

A.1.4.1 PT is a normal PT (not a headset portable part)

Clause A.1.4.1 of TS 102 841 [16] shall apply.

A.1.4.2 PT is a headset portable part

Clause A.1.4.2 of TS 102 841 [16] shall apply.

A.2 Declarations for fixed part

A.2.1 Optional and conditional FT features

This clause contains the optional and conditional features which can be declared by the manufacturer on the FT side and lists all optional, mandatory or conditional tests associated to these features.

Table A.14: Optional FT features supported

Feature no	Feature name	Reference to TS 102 527-3 [14]	Status	TC reference
NG1.N.11	Call deflection (internal or external)	7.4.4.2	O	TC_FT_NG1.N.11_BV_101 TC_FT_NG1.N.11_BV_201 TC_FT_NG1.N.11_BV_202
NG1.N.14	Multiple Lines	7.4.7	O	TC_FT_NG1.N.14_BV_301 TC_FT_NG1.N.14_BV_302 TC_FT_NG1.N.14_BV_303 TC_FT_NG1.N.14_BV_304 TC_FT_NG1.N.14_BV_305 TC_FT_NG1.N.14_BV_306 TC_FT_NG1.N.14_BV_401
NG1.N.22	Handling of lines where second calls are signalled in-band	7.4.3.10	O	TC_FT_NG1.N.22_BV_101 TC_FT_NG1.N.22_BV_301 TC_FT_NG1.N.22_BV_302 TC_FT_NG1.N.22_BV_303
NG1.N.24	Short Message Service	7.4.35	O	TC_FT_NG1.N.16_BV_7401 TC_FT_NG1.N.16_BV_7402 TC_FT_NG1.N.16_BV_7403 TC_FT_NG1.N.16_BV_7404 TC_FT_NG1.N.16_BV_7405 TC_FT_NG1.N.16_BV_7406 TC_FT_NG1.N.16_BV_7407 TC_FT_NG1.N.24_BV_101 TC_FT_NG1.N.24_BV_102 TC_FT_NG1.N.24_BV_103 TC_FT_NG1.N.24_BV_104 TC_FT_NG1.N.24_BV_105 TC_FT_NG1.N.24_BV_301 TC_FT_NG1.N.24_BV_302 TC_FT_NG1.N.24_BV_303 TC_FT_NG1.N.24_BV_304 TC_FT_NG1.N.24_BV_305 TC_FT_NG1.N.24_BV_306 TC_FT_NG1.N.24_BV_307 TC_FT_NG1.N.24_BV_308 TC_FT_NG1.N.24_BV_309 TC_FT_NG1.N.24_BV_310 TC_FT_NG1.N.24_BV_311 TC_FT_NG1.N.24_BV_401 TC_FT_NG1.N.24_BV_601 TC_FT_NG1.N.24_BV_602 TC_FT_NG1.N.24_BV_603 TC_FT_NG1.N.24_BV_604
NG1.N.25	Digital Telephone Answering Machine (DTAM)	7.4.36	O	TC_FT_NG1.N.25_BV_101 TC_FT_NG1.N.25_BV_102 TC_FT_NG1.N.25_BV_103 TC_FT_NG1.N.25_BV_104 TC_FT_NG1.N.25_BV_201 TC_FT_NG1.N.25_BV_202 TC_FT_NG1.N.25_BV_301 TC_FT_NG1.N.25_BV_302 TC_FT_NG1.N.25_BV_400

NG1.N.26	Call Screening	7.4.36.6	O	TC_FT_NG1.N.26_BV_101 TC_FT_NG1.N.26_BV_102 TC_FT_NG1.N.26_BV_201 TC_FT_NG1.N.26_BV_202 TC_FT_NG1.N.25_BV_301
NG1.A.1	Easy PIN code registration	7.10.1.1	O	TC_FT_NG1.A.1_BV_401 TC_FT_NG1.A.2_BV_501
NG1.A.3	Handset locator	7.10.2	O	TC_FT_NG1.A.3_BV_101

A.2.2 Extra information for FT testing

Clause A.2.2 of TS 102 841 [16] shall apply.

In addition to the optional features supported, the supplier shall declare additional information related to the FT implementation and to the network line environment.

Table A.15: Implementation extra information for FT testing

Item no	Implementation extra information	Reference to TS 102 527-3 [14]	Possible values to be declared
FT_IXIT_11	Simultaneous accesses to the same list from 2 PPs	7.4.10.1	Not supported Supported
FT_IXIT_12	Default attachment after registration to at least one line (see note)	7.4.11.2	Not supported Supported
FT_IXIT_13	Associated melody field in Contact List entry	7.4.10.5.7	Not supported Supported
FT_IXIT_14	Base station name	7.10.1.3.2	String (up to 17 characters)
FT_IXIT_15	Support of three parallel call contexts (or more) on 1 PP-FP pair (busy system requirement).		Not supported Supported
FT_IXIT_16	Support call forwarding busy triggered upon 2nd incoming call (not upon 3rd incoming call).		Not supported Supported
FT_IXIT_17	Non line related service(s) offered through main data cable connection (note 2)		YES NO
FT_IXIT_40	FT allows editing of the 'Enable SMS' field in the SMS Settings List	Annex H	Not supported Supported
FT_IXIT_41	FT allows editing of the 'SMS send server' field in the SMS Settings List	Annex H	Not supported Supported
FT_IXIT_42	FT allows editing of the 'SMS receive server' field in the SMS Settings List	Annex H	Not supported Supported
FT_IXIT_43	FT allows editing of the 'Max SMS size' field in the SMS Settings List	Annex H	Not supported Supported
FT_IXIT_45	DTAM profile supported (note 3)	7.4.36.2	Voice-oriented Visual
FT_IXIT_46	Local or Remote DTAM supported (note 3)	7.4.36.1.1 7.4.36.5.1.1	Local Remote
FT_IXIT_47	DTAM manages fully Missed Calls (note 3)	7.4.36.1.3	YES NO
FT_IXIT_48	DTAM manages two lines (line 0 and line 1) (note 3 and 4)		YES NO
FT_IXIT_49	DTAM supports more than one Welcome Message (note 3)	7.4.36.1.3 7.4.36.5.4	YES NO
FT_IXIT_50	Maximum duration of a message on the DTAM (in seconds) (note 3)		nn
FT_IXIT_51	DTAM activation and timeout is editable for the DTAM (note 3)	Annex H	nn
FT_IXIT_52	DTAM web link is editable for the DTAM (note 3)	Annex H	00H Undefined 01H EMC

FT_IXIT_53	Welcome message parameters is editable for the DTAM (note 3)	Annex H	00H..FFH
FT_IXIT_54	Multiple PPs screening	7.4.36.6.10	Not Supported
			Supported
FT_IXIT_55	'Screening parameters' are editable for the DTAM (note 3)	Annex H	00H..FFH
NOTE 1: This declaration is only used for a multiple line FT connected to at least two lines at the time of registration. If the FT is connected to a single line (and whether it supports multiple lines or not), default attachment to that line is mandatory. See TS 102 527-3 [14], clause 7.4.11.2.			
NOTE 2: Examples range from firmware upgrade to network provided list of contacts, etc. FT_IXIT_17 is YES as soon as one such service exists and is affected by the main data cable disconnection. If FT_IXIT_17=YES, a network error with implementer chosen error number is used.			
NOTE 3: The FT_IXIT relates to the DTAM used in the tested FT+DTAM configuration; it is assumed that the IXIT value does not depend on the line when FT_IXIT_48=YES.			
NOTE 4: The DTAM used in the tested FT+DTAM configuration is assumed to manage at least line 0.			

The "line 0" is the default line used when running the single line test cases. The following extra information related to the behaviour of this line shall be given by the manufacturer.

Table A.16: Line 0 extra information for FT testing

Item no	Line extra information	Reference to TS 102 527-3 [14]	Possible values to be declared
FT_IXIT_20	Line 0 identifier value (lid0)	7.4.5	00H to 09H (note 1)
FT_IXIT_21	Line 0 second call handling type	7.4.3.10	Common parallel calls
			Double calls with in-band signalling
FT_IXIT_22	Line 0 CC-state machine behaviour	7.4.6.1	Non early {CC-CONNECT}
			Early {CC-CONNECT}
FT_IXIT_23	Line 0 UTF-8 CNIP	7.4.17	Non UTF-8 enabled line
			UTF-8 enabled line
FT_IXIT_24	Line 0 parallel call release command (note 2)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_25	Line 0 call waiting rejection command (note 2)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_26	Line 0 putting a call on-hold command (note 2)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_27	Line 0 resuming a call put on-hold command (note 2)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_28	Line name of Line 0	7.4.10.5.1.6	String
FT_IXIT_29.1	CFU activation code (note 3)	7.4.11.4.11	String (possibly empty)
FT_IXIT_29.2	CFU de-activation code (note 3)	7.4.11.4.11	String (possibly empty)
FT_IXIT_29.3	CFNA activation code (note 3)	7.4.11.4.12	String (possibly empty)
FT_IXIT_29.4	CFNA de-activation code (note 3)	7.4.11.4.12	String (possibly empty)
FT_IXIT_29.5	CFB activation code (note 3)	7.4.11.4.13	String (possibly empty)
FT_IXIT_29.6	CFB de-activation code (note 3)	7.4.11.4.13	String (possibly empty)
FT_IXIT_29.7	Permanent CLIR activation code (note 3)	7.4.11.4.10	String (possibly empty)
FT_IXIT_29.8	Permanent CLIR de-activation code (note 3)	7.4.11.4.10	String (possibly empty)
FT_IXIT_29.9	Main data cable affects the use of line 0 (note 4)		YES
			NO
NOTE 1: Line identifier in the interval 0AH..7EH are not allowed within NG1.N.12_4 "Backward-compatible line identification for a first external outgoing call using <<MULTI-KEYPAD>> IE" procedure.			
NOTE 2: This extra information is only required when NG1.N.22 "Handling of lines where second calls are signalled in-band" is supported on this line, i.e. FT_IXIT_31 declared to 'Double calls with in-band signalling' value.			
NOTE 3: An empty string indicates that no code is necessary to activate or deactivate the feature on network side for line 0; the corresponding code length shall be set to zero.			
NOTE 4: if FT_IXIT_29.9=YES, a network error with implementer chosen error number is used.			

IF NG1.N.14 "Multiple lines" is supported, the "line 1" is the second line used when running the multiple lines test cases. The following extra information related to the behaviour of this line shall be given by the manufacturer.

Table A.17: Line 1 extra information for FT testing

Item no	Line extra information	Reference to TS 102 527-3 [14]	Possible values to be declared
FT_IXIT_30	Line 1 identifier value (lid1)	7.4.5	00H to 09H (note 1)
FT_IXIT_31	Line 1 second call handling type (note 2)	7.4.3.10	Common parallel calls
			Double calls with in-band signalling
FT_IXIT_32	Line 1 CC-state machine behaviour	7.4.6.1	Non early {CC-CONNECT}
			Early {CC-CONNECT}
FT_IXIT_33	Line 1 UTF-8 CNIP	7.4.17	Non UTF-8 enabled line
			UTF-8 enabled line
FT_IXIT_34	Line 1 parallel call release command (note 3)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_35	Line 1 call waiting rejection command (note 3)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_36	Line 1 putting a call on-hold command (note 3)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_37	Line 1 resuming a call put on-hold command (note 3)	7.4.3.10.3.2	Not supported
			Supported
FT_IXIT_38	Line name of Line 1	7.4.10.5.1.6	String

NOTE 1: Line identifier in the interval 0AH..7EH are not allowed within NG1.N.12_4 "Backward-compatible line identification for a first external outgoing call using <<MULTI-KEYPAD>> IE" procedure.
NOTE 2: IF NG1.N.22 "Handling of lines where second calls are signalled in-band" is supported THEN at least one line shall be 'Double calls with in-band signalling' second call handling type.
NOTE 3: This extra information is only required when NG1.N.22 "Handling of lines where second calls are signalled in-band" is supported on this line, i.e. FT_IXIT_31 declared to 'Double calls with in-band signalling' value.

A.2.3 Optional or conditional FT procedures

Clause A.2.3 of TS 102 841 [16] shall apply.

A.2.4 FT relevant test cases list

According to the support of NG1.N.22 "Handling of lines where second calls are signalled in-band" feature, the following configurations are possible:

- FT handles only 'Common parallel call procedures' lines.
- FT handles only 'double call with in-band signalling' lines.
- FT handles 'common parallel call procedures' lines and 'double call with in-band signalling' lines.

A.2.4.1 FT handling only 'Common parallel call procedures' lines

Clause A.2.4.1 of TS 102 841 [16] shall apply.

A.2.4.2 FT handling only 'double call with in-band signalling' lines

Clause A.2.4.2 of TS 102 841 [16] shall apply.

A.2.4.3 FT handling 'Common parallel call procedures' lines and 'double call with in-band signalling' lines

Clause A.2.4.3 of TS 102 841 [16] shall apply.

Annex B (informative): List of NG DECT Part 5 procedures

The Table B.1 gives the list of NG DECT Part 5 procedures. The reference documents are TS 102 527-5 [15], TS 102 527-3 [14], TS 102 527-1 [13] or EN 300 444 [12]. The status of each feature and procedure are given in TS 102 527-5 [15].

The procedure number 'feature number_x' was created for the need of the present document. This procedure number is used in the TC naming convention. For example, the PT test cases related to the **NG1.N.2_1** "Codec change" procedure are called **TC_PT_NG1.N.2_BV_1xx**.

In addition to the list provided in annex B of of TS 102 841 [16] the following list also applies to New Generation DECT Part 5.

Table B.1: List of NG DECT Part 5 procedures

1.1 New Generation DECT Speech Services support status		**Reference**
1.2 NWK features support status		
NG1.N.16	**List Access Service**	
NG1.N.16_70	Extended list change notification	7.4.10.9
NG1.N.16_71	Log management in case of user interaction	7.4.10.10
NG1.N.16_72	Read selected entries	7.4.10.4.11
NG1.N.16_73	Write entry	7.4.10.4.12
NG1.N.16_74	Abnormal release in case of call setup collisions	9.5.2.3 [5]
NG1.N.16_75	List access service call and interactions with voice calls	7.4.10.6 [14] (note 1)
NG1.N.16_76	List access setup	7.4.10.6.1 [14]
NG1.N.16_77	List access with possible first voice call initiation	7.4.10.6.2 [14]
NG1.N.16_78	Incoming first voice call during existing list access session	7.4.10.6.3 [14]
NG1.N.16_79	List access during existing voice call with possible second call initiation	7.4.10.6.4 [14]
NG1.N.16_80	Switching between LiA session and voice call	7.4.10.6.5 [14]
NG1.N.16_81	Returning to LiA session after voice call termination	7.4.10.6.6 [14]
NG1.N.16_83	Crossing between LiA service call release and incoming voice call	7.4.10.6.7 [14]
NG1.N.16_84	Line and Diagnostic Statuses List	7.4.34.3
NG1.N.16_85	SMS Settings List	7.4.35.4.1
NG1.N.16_86	Incoming SMS List	7.4.35.5.2
NG1.N.16_87	Sent SMS List	7.4.35.5.3
NG1.N.16_88	Outgoing SMS List	7.4.35.5.4
NG1.N.16_89	Draft SMS List	7.4.35.5.5
NG1.N.16_90	DTAM Settings List	7.4.36.5.2
NG1.N.16_91	DTAM Incoming Calls List	7.4.36.5.3
NG1.N.16_92	DTAM Welcome Message List	7.4.36.5.4
NG1.N.16_93	FP power level	7.4.11.3.14
NG1.N.23	**Line and diagnostic information**	5.2 [15]
NG1.N.23_1	Generic events notification, general	7.4.1.1 [15]
NG1.N.23_2	General requirements	7.4.34.1 [15]
NG1.N.23_3	Exposed diagnostic information	7.4.34.2 [15]
NG1.N.23_4	Line and Diagnostic Statuses List [14]	7.4.34.3 [15]
NG1.N.23_5	Diagnostic indication [14]	7.4.1.5 [15]
NG1.N.24	**Short Messaging Service (SMS)**	5.2 [15]
NG1.N.24_1	General requirements	7.4.35.1 [15]
NG1.N.24_2	Incoming SMS handling	7.4.35.2 [15]
NG1.N.24_3	Outgoing SMS handling	7.4.35.3 [15]
NG1.N.24_4	SMS Settings	7.4.35.4 [15]
NG1.N.24_5	SMS related entry fields and lists	7.4.35.5 [15]
NG1.N.25	**Digital Telephone Answering Machine (DTAM)**	5.2 [15]
NG1.N.25_1	Voice Message waiting notification	7.4.1.2 [15]
NG1.N.25_2	List access service	7.4.10 [15]
NG1.N.25_3	DTAM General description	7.4.36.1 [15]
NG1.N.25_4	Voice oriented DTAM	7.4.36.2.1 [15]
NG1.N.25_5	Visual DTAM	7.4.36.2.2 [15]
NG1.N.25_6	DTAM consulting call	7.4.36.3 [15]

1.1 New Generation DECT Speech Services support status		Reference
1.2 NWK features support status		
NG1.N.25_7	DTAM Commands	7.4.36.4 [15]
NG1.N.25_8	DTAM specific fields description	7.4.36.5.1 [15]
NG1.N.25_9	DTAM Settings List	7.4.36.5.2 [15]
NG1.N.25_10	DTAM Incoming Calls List	7.4.36.5.3 [15]
NG1.N.25_11	DTAM Welcome Message List	7.4.36.5.4 [15]
NG1.N.25_12	List Access service call transformation into a DTAM consulting call	7.4.36.5.5 [15]
1.3 Data Link Control (DLC) services support status		
1.4 Medium Access Control (MAC) services support status		
1.5 Physical layer (PHL) services support status		
1.6 Speech coding and audio features support status		
1.7 Application features support status		
NOTE: The reference only concerns the preliminary text of clause 7.4.10.6, before clause 7.4.10.6.1 in [14].		

Annex C (normative): Configuration for testing

The information contained in the following subclauses is required for configuration of the test equipment referred to in the present document. The label of each item does not explicitly appear in the test cases, nevertheless the related information are used either within stimulus or pass criteria to avoid human intervention when running some test cases.

C.1 Portable part configuration to be declared by supplier

Clause C.1 of TS 102 841 [16] shall apply.

C.2 Fixed part internal configuration to be declared by supplier

Clause C.2 of TS 102 841 [16] shall apply.

C.3 Test environment configuration to be declared by test house or supplier

Clause C.3 of TS 102 841 [16] shall apply.

Annex D (normative): Amendments to other DECT specifications

D.1 Amendments to the Technical Basis for Regulation TBR 022 amended by TBR 022/A1 applicable to equipment compliant with TS 102 527-5

Clause D.1 of TS 102 841 [16] shall apply.

D.1.1 Additional testing requirements for PP side

Clause D.1.1 of TS 102 841 [16] shall apply.

D.1.2 Additional testing requirements for FP side

Clause D.1.2 of TS 102 841 [16] shall apply.

D.1.3 Additional Test Cases applicable to equipment compliant with TS 102 527-5

Clause D.1.3 of TS 102 841 [16] shall apply.

Annex E (informative): Test case status modifications from TS 102 841

This annex lists for information features and test cases existing in TS 102 841 [16] and for which the status has changed in the present document (i.e. for Part 5 devices).

E.1 PT test cases

E.1.1 Modified statuses for DECT Part 1 PT features and tests cases

None.

E.1.2 Modified statuses for DECT Part 3 PT features and tests cases

Table E.1: Modified statuses for a Part 5 PT

NG DECT Part 3 PT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part 5 PT Status**
	NG1.N.9	**3-party conference with established external and/or internal calls**	M
	NG1.N.10	**Intrusion call**	M
	NG1.N.16	**List access service**	(note 1)
	TC_PT_NG1.N.16_BV_2101	Contact List - Read entries - Initiate an external call	I (note 2)
	TC_PT_NG1.N.16_BV_4601	Line Settings List - Intrusion call - Edit entry - Save entry	M
	TC_PT_NG1.N.16_BV_4701	Line Settings List - Permanent CLIR - Edit entry - Save entry - 'Value' subfield	M
	NG1.N.17	**Calling line identity restriction**	M
	GAP.N.35	**Enhanced security**	(note 1)
	TC_PT_GAP.N.35_BV_201	Indication of Support of 're-keying' and 'early encryption' in terminal capabilities during registration	M
	TC_PT_GAP.N.35_BV_202	Indication of Support of 're-keying' and 'early encryption' in terminal capabilities during location registration	M
	TC_PT_GAP.N.35_BV_203	Re-keying procedure	M
	TC_PT_GAP.N.35_BV_301	Assignment of default cipher key and usage of early encryption during incoming call	M
	TC_PT_GAP.N.35_BV_302	Usage of early encryption during outgoing call	M
	TC_PT_GAP.N.35_BV_303	Usage of early encryption for MM procedure	M
	TC_PT_GAP.N.35_BV_304	Overwriting a default cipher key by assigning a new default cipher key with the same index	M
	TC_PT_GAP.N.35_BV_305	Assign two default cipher keys with different indices.	M
	TC_PT_GAP.N.35_BV_306	PP releases connection in case FP rejects early encryption on MAC layer	M
	TC_PT_GAP.N.35_BV_506	Release of unexpectedly unencrypted outgoing call in connect state despite of successful authentication	I (note 3)
NOTE 1: This line is kept for separating features but the feature status itself has not changed. NOTE 2: This test case is replaced by TC_PT_NG1.N.16_BV_2114 which uses a longer Contact List. NOTE 3: This test case is replaced by TC_PT_GAP.N.35_BV_508 that also checks release of subsequent calls.			

E.2 FT test cases

E.2.1 Modified statuses for DECT Part 1 FT features and tests cases

None.

E.2.2 Modified statuses for DECT Part 3 FT features and tests cases

Table E.2: Modified statuses for a Part 5 FT

NG DECT Part 3 FT test case index			
Test Group Reference	**Test Case Id**	**Description**	**Part5 FT status**
	NG1.N.9	**3-party conference with established external and/or internal calls**	M
	NG1.N.10	**Intrusion call**	M
	NG1.N.16	**List access service**	(note)
	TC_FT_NG1.N.16_BV_4601	Line Settings List - Intrusion call - Edit entry - Save entry - List change notification - Read entries	M
	TC_FT_NG1.N.16_BV_4701	Line Settings List - Permanent CLIR - Edit entry - Save entry - List change notification - Read entries	M
	NG1.N.17	**Calling line identity restriction**	M
	GAP.N.35	**Enhanced security**	(note 1)
	TC_FT_GAP.N.35_BV_201	Verify indication of Support of 'Re-keying' and 'early encryption' in extended higher layer capabilities part 2	M
	TC_FT_GAP.N.35_BV_202	Usage and frequency of re-keying procedure	M
	TC_FT_GAP.N.35_BV_203	Abnormal release if encryption for re-keying is not activated in MAC layer	M
	TC_FT_GAP.N.35_BV_204	Abnormal release if PP does not answer to {AUTHENTICATION-REQUEST} message for re-keying procedure	M
	TC_FT_GAP.N.35_BV_205	Abnormal release if PP answers to {AUTHENTICATION-REQUEST} message for re-keying procedure with { AUTHENTICATION-REJECT}	M
	TC_FT_GAP.N.35_BV_206	Abnormal release if PP answers to {CIPHER_REQUEST} message for re-keying procedure with { CIPHER_REJECT}	M
	TC_FT_GAP.N.35_BV_301	Assignment of default cipher key and usage of early encryption during incoming call.	M
	TC_FT_GAP.N.35_BV_302	Usage of early encryption during outgoing call	M
	TC_FT_GAP.N.35_BV_303	Usage of early encryption for MM procedure	M
	NG1.A.2	**Easy pairing registration**	(note)
	TC_FT_NG1.A.2_BV_501	Base station name selection	M
NOTE: This line is kept for separating features but the feature status itself has not changed.			

History

Document history		
V1.1.1	January 2014	Publication