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**Radio Equipment and Systems (RES);
Digital Enhanced Cordless Telecommunications/
Global System for Mobile communications
(DECT/GSM) Interworking Profile (IWP);
Profile Test Specification (PTS);
Profile Specific Test Specification (PSTS);
Part 3: Fixed radio Termination (FT)**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

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

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Foreword

This draft European Telecommunication Standard (ETS) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Public Enquiry phase of the ETSI standards approval procedure.

The meaning of the abbreviation DECT has been changed to Digital Enhanced Cordless Telecommunications (DECT) by the decision of the 23rd ETSI Technical Assembly (TA), 7th November 1995.

The Digital Enhanced Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) Interworking Profile (IWP) Profile test Specification (PTS) comprises three parts:

Part 1: "Summary";

Part 2: "Portable radio Termination (PT)";

Part 3: "Fixed radio Termination (FT)".

| Proposed transposition dates | |
|---|---------------------------------|
| Date of latest announcement of this ETS (doa): | 3 months after ETSI publication |
| Date of latest publication of new National Standard or endorsement of this ETS (dop/e): | 6 months after doa |
| Date of withdrawal of any conflicting National Standard (dow): | 6 months after doa |

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1 Scope

This European Telecommunication Standard (ETS) contains the test specification for Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM) Interworking Profile (IWP) Fixed Part (FP) applications as specified in ETS 300 370 [3].

The main objective of the DECT/GSM IWP test specification is to provide approval tests giving a high probability of air interface inter-operability between any DECT FP and any Portable Part (PP) conforming to ETS 300 370 [3] offered by different manufacturers.

All FPs conforming to ETS 300 370 [3] and supporting only Access Rights Identity (ARI) class D, as far as DECT Network (NWK) layer is concerned, are tested for conformance only to this ETS.

All FPs conforming to ETS 300 370 [3] and supporting in addition to ARI class D any other ARI classes, as far as DECT NWK layer is concerned, are tested for conformance separately:

- first to ETS 300 494-1 [7] and ETS 300 494-3 [8]; and
- second to this ETS.

All FPs conforming to ETS 300 370 [3], as far as the Data Link Control (DLC) layer, Medium Access Control (MAC) layer and PHL layer are concerned, are tested to ETS 300 494-1 [7] and ETS 300 494-3 [8].

ISO/IEC 9646 Parts 1 to 7 [9 - 14] are used as the basis for the test methodology, and as the basis for test case specification.

The test cases if listed in this ETS have been derived from ETS 300 497 Parts 1 to 9 [25 - 6] or ETS 300 494-1 [7] and ETS 300 494-3 [8]. Additional DECT/GSM IWP specific test cases are included where required. The Profile IXIT is based on ETS 300 497 Parts 8 to 9 [5 - 6] and GAP Profile IXIT ETS 300 494-1 [7] and ETS 300 494-3 [8].

Annex A contains the Abstract Test Suite (ATS).

2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of, any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 175-5: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [2] ETS 300 466: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications/Global System for Mobile Communications (DECT/GSM) interworking profile; General description of service requirements; Functional capabilities and information flows".
- [3] ETS 300 370: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) inter-working profile; Access and mapping (Protocol/procedure description for 3,1 kHz speech service)".
- [4] prETS 300 704-2: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) Interworking Profile (IWP); Profile Implementation Conformance Statement (ICS); Part 2: Fixed radio Termination (FT)".

- [5] prETS 300 497-8: "Radio Equipment and Systems (RES); 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)".
- [6] prETS 300 497-9: "Radio Equipment and Systems (RES); 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)".
- [7] prETS 300 494-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 1: Summary".
- [8] prETS 300 494-3: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".
- [9] ISO/IEC 9646-1 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also CCITT Recommendation X.290 (1991)).
- [10] ISO/IEC 9646-2 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification". (See also CCITT Recommendation X.291 (1991)).
- [11] ISO/IEC 9646-3 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The tree and tabular combined notation". (See also CCITT Recommendation X.292 (1992)).
- [12] ISO/IEC 9646-5 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process". (See also CCITT Recommendation X.292 (1992)).
- [13] ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".
- [14] ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

- terms defined in ISO/IEC 9646 Parts 1 to 3 [9 - 11] and Parts 5 to 7 [12 - 14];
- definitions in ETS 300 370 [3];
- definitions in pr ETS 300 466 [2].

3.2 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

| | |
|--------|---|
| ATS | Abstract Test Suite |
| CC | Call Control |
| CI | Common Interface |
| DLC | Data Link Control |
| FT | Fixed radio Termination |
| GAP | Generic Access Profile |
| GSM | Global System for Mobile communications |
| ICS | Implementation Conformance Statement |
| IPUI | International Portable User Identity |
| IUT | Implementation Under Test |
| IXIT | Implementation Extra Information for Testing |
| IWP | Interworking Profile |
| LCE | Link Control Entity |
| LLME | Lower Layer Management Entity |
| LLN | Logical Link Number |
| MAC | Medium Access Control |
| MM | Mobility Management |
| NLF | New Link Flag |
| NWK | Network |
| PARK | Portable Access Rights Key |
| PHL | Physical |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation Extra Information for Testing |
| PP | Portable Part |
| PT | Portable radio Termination |
| PSTS | Profile Specific Test Specification |
| PTS | Profile Test Specification |
| SARI | Secondary Access Rights Identity |
| SUT | System Under Test |
| TCL | Test Case Library |
| TPUI | Temporary Portable User Identity |
| TS | Test System |
| TSO | Test Suite Overview |
| TSS&TP | Test Suite Structure & Test Purposes |
| TTCN | Tree and Tabular Combined Notation |

4 Relevant test cases list

4.1 Network (NWK) layer

This subclause includes lists of test suite groups and abstract test cases relevant for DECT/GSM IWP derived from ETS 300 497-9 [6] and ETS 300 494-3 [8].

If a test purpose, described in ETS 300 497-8 [5], is outside the scope of the DECT/GSM IWP the name of the relevant test case is excluded from the list.

NOTE: Exclusion of a test case may lead to exclusion of test steps, constraints, etc. and this should be taken into account when extracting the relevant information from ETS 300 497-9 [6].

If a test purpose, described in ETS 300 497-8 [5], is within the scope of the DECT/GSM IWP the name of the relevant test case is included into the list.

4.1.1 Test suite structure

Table 1: Test suite structure

| Test suite structure | |
|----------------------|---|
| Suite name: | nwk_ft |
| Standards Ref: | ETS 300 370 [3]; ETS 300 497-9 [6]; ETS 300 494-3 [8] |
| Profile ICS Ref: | ETS 300 704-2 [4] |
| Profile IXIT Ref: | ETS 300 702-3 (this ETS) |
| Test Method: | remote |
| Comments: | |
| Test group reference | Test group objective |
| FT/ | To check the behaviour of the NWK layer of the FT(IUT) |
| FT/CC/ | To check the IUT CC-state machine behaviour |
| FT/CC/IT/ | To check that the IUT CC-state machine provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/CC/CA/ | Limited testing that the observable capabilities of the CC entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the Profile ICS/Profile IXIT |
| FT/CC/BV/ | To tests the CC entity of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/CC/BV/OC/ | To check the IUT's behaviours to set-up an outgoing call |
| FT/CC/BV/IC/ | To check the IUT's behaviours to set-up an incoming call |
| FT/CC/BV/CR/ | To check the IUT's behaviours to release an outgoing/incoming call |
| FT/CC/TI/ | To verify that the IUT CC timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| FT/MM/ | To check the behaviour of the MM entity of the IUT |
| FT/MM/IT/ | To check that the MM entity of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/MM/CA/ | Limited testing that the observable capabilities of the MM entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the Profile ICS/Profile IXIT |
| FT/MM/BV/ | To tests the MM entity of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/MM/BV/AU/ | To check the IUT's behaviour concerning the authentication procedures |
| FT/MM/BV/ID/ | To check the IUT's behaviour concerning identity procedures |
| FT/MM/BV/LO/ | To check the IUT's behaviour concerning the location procedures |
| FT/MM/BV/CH/ | To check the IUT's behaviour concerning the ciphering related procedures |
| FT/MM/TI/ | To verify that the IUT MM timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| FT/LC/ | To check the behaviour of the LCE of the IUT |
| FT/LC/IT/ | To check that LCE of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/LC/CA/ | Limited testing that the observable capabilities of the LCE of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the Profile ICS/Profile IXIT |
| FT/LC/BV/ | To tests the LCE of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/LC/BV/LE/ | To check the IUT's behaviour concerning the connection oriented link establishment procedures |
| FT/LC/TI/ | To verify that the IUT LCE timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| Detailed comments: | |
| 1. | The sub-sub-groups with identifiers FT/xx/IT/ and FT/xx/CA/ do not include their own test cases but only list an appropriate selection of tests from the relevant sub-group with identifier FT/xx/. |

4.1.2 Test case index

Table 2: Test case index

| Test case index | | |
|-----------------------|------------------------|-------------|
| Test group reference | Test case identity | Description |
| FT/CC/BV/OC/ | No relevant test cases | |
| FT/CC/BV/IC/ | No relevant test cases | |
| FT/CC/BV/CR/ | No relevant test cases | |
| FT/CC/CI/ | No relevant test cases | |
| FT/MM/BV/AU/ | No relevant test cases | |
| FT/MM/BV/ID/ | No relevant test cases | |
| FT/MM/BV/LO/ | No relevant test cases | |
| FT/MM/BV/CH/ | No relevant test cases | |
| FT/MM/CI/ | No relevant test cases | |
| FT/LC/BV/LE/ | No relevant test cases | |
| FT/LC/CI/ | No relevant test cases | |
| Detailed comments: | | |
| 1. The FT is the IUT. | | |

4.2 Data Link Control (DLC) layer

All test cases for DLC layer as specified in ETS 300 494-3 [8] apply.

4.3 Medium Access Control (MAC) layer

All test cases for MAC layer as specified in ETS 300 494-3 [8] apply.

4.4 Physical (PHL) layer

All test cases for PHL layer as specified in ETS 300 494-3 [8] apply.

5 Replacement lists

5.1 General

The following subclauses list all the necessary replacements due to specific DECT/GSM IWP requirements, in the following ways:

- a) if a test purpose is still valid but the relevant test case is not usable (e.g. because of specific requirements to the information flow it requires additional test steps to be added to the behaviour tree), the test case name identifier (preceded with (TCL), to indicate the derivation from the test case library), as specified in ETS 300 497-9 [6] and preceded by ETS 300 497-9 [6], is listed together with the test case name identifier (preceded with (DECT/GSM)) of the test specified in this ETS (see subclause 5.2);
- b) some of the test cases can be re-used but with replacement of the contents of some of the test step used in the behaviour description (e.g. preambles for CC testing shall not include obtaining access rights procedure), the test step name identifier, as specified in ETS 300 497-9 [6] and preceded by ETS 300 497-9 [6], is listed together with the test step name identifier of the test step specified in this ETS (see subclause 5.3);
- c) some of the test cases can be re-used but with replacement of the contents of some of the constraints used in the behaviour description (e.g. a message used need to include an additional information element), the constraint name identifier, as specified in ETS 300 497-9 [6] and preceded by ETS 300 497-9 [6], is listed together with the constraint name identifier of the test constraint specified in this ETS (see subclause 5.4).

In addition, all the test cases listed in subclause 4.1.2, that are used unchanged for the purposes of this ETS but are impacted by changes in test steps or constraints they used are listed in subclause 5.5.

5.2 Test case replacement list

Table 3: Test case replacement list

| Test case index | | |
|---|---------------------------------|--|
| Test case identity in Test Case Library (TCL) | Test case identity DECT/GSM IWP | Description |
| (TCL) TP/FT/CC/BV/OC-01 | (DECT/GSM) TP/FT/CC/BV/OC-07 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/OC-02 | (DECT/GSM) TP/FT/CC/BV/OC-08 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/OC-04 | (DECT/GSM) TP/FT/CC/BV/OC-09 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/IC-01 | (DECT/GSM) TP/FT/CC/BV/IC-03 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/IC-02 | (DECT/GSM) TP/FT/CC/BV/IC-04 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-04 | (DECT/GSM) TP/FT/CC/BV/CR-16 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-05 | (DECT/GSM) TP/FT/CC/BV/CR-17 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-06 | (DECT/GSM) TP/FT/CC/BV/CR-18 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-07 | (DECT/GSM) TP/FT/CC/BV/CR-19 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-08 | (DECT/GSM) TP/FT/CC/BV/CR-20 | Reference, comments and detailed comments changed |
| (TCL) TP/FT/CC/BV/CR-09 | (DECT/GSM) TP/FT/CC/BV/CR-21 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/TI-01 | (DECT/GSM) TP/FT/CC/TI-05 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/TI-02 | (DECT/GSM) TP/FT/CC/TI-06 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/TI-03 | (DECT/GSM) TP/FT/CC/TI-07 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/CC/TI-04 | (DECT/GSM) TP/FT/CC/TI-08 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/MM/TI-01 | (DECT/GSM) TP/FT/MM/TI-08 | Reference, behaviour description and detailed comments changed |
| (TCL) TP/FT/MM/TI-02 | (DECT/GSM) TP/FT/MM/TI-09 | Reference, comments, behaviour description and detailed comments changed |
| (TCL) TP/FT/MM/TI-06 | (DECT/GSM) TP/FT/MM/TI-10 | Reference, comments, behaviour description and detailed comments changed |

5.3 Test step replacement list

Table 4: Test step replacement list

| Test Step Index | | |
|-------------------------------------|-------------------------------------|--|
| Test Step Id TCL | Test Step Id DECT/GSM IWP | Description |
| PR_goto_f01 | PR_goto_f01 | Behaviour description changed |
| PR_goto_f06 | PR_goto_f06 | Behaviour description, constraints ref, comments and detailed comments changed |
| PR_goto_f07 | PR_goto_f07 | Behaviour description changed |
| PR_goto_f10 | PR_goto_f10 | Behaviour description constraints ref, comments and detailed comments changed |
| PR_goto_f19 | PR_goto_f19 | Behaviour description changed |
| PR_select_state | PR_select_state | Behaviour description changed |
| STP_handle_identity_request | STP_handle_identity_request | Behaviour description changed |
| STP_init_broadcast_bits | STP_init_broadcast_bits | Objective changed |
| STP_invoke_ft_init_cipherring_on | STP_invoke_ft_init_cipherring_on | Constraints ref and detailed comments changed |
| STP_invoke_ft_init_cipherring_off | STP_invoke_ft_init_cipherring_off | Constraints ref and detailed comments changed |
| STP_invoke_pt_authentication | STP_invoke_pt_authentication | Constraints ref and detailed comments changed |
| STP_invoke_identity_request | STP_invoke_identity_request | Detailed comments changed |
| STP_perform_locate_request | STP_perform_locate_request | Behaviour description and detailed comments changed |
| STP_send_called_party_number | STP_send_called_party_number | Behaviour description, constraints ref, comments and detailed comments changed |
| DF_handle_cc_timeout | DF_handle_cc_timeout | Behaviour description and detailed comments changed |
| DF_handle_mm_events | DF_handle_mm_events | Behaviour description changed |
| DF_handle_mm_invokation | DF_handle_mm_invokation | Behaviour description changed |
| DFSTEP_handle_ft_init_cipherring_on | DFSTEP_handle_ft_init_cipherring_on | Behaviour description and detailed comments changed |
| DFSTEP_handle_pt_authentication | DFSTEP_handle_pt_authentication | Behaviour description and detailed comments changed |

5.4 Constraint replacement list

Table 5: Constraint replacement list

| Constraint index | | |
|----------------------------|----------------------------|---|
| Constraint Id TCL | Constraint Id DECT/GSM IWP | Description |
| Auth_type_rx_base | Auth_type_rx_base | Element values and comments changed |
| Auth_type_rx_dck_no_zap | Auth_type_rx_dck_no_zap | Element names, element values and comments changed |
| Fixed_id_rx_base | Fixed_id_rx_base | Element value changed |
| Fixed_id_ari_rpn | Fixed_id_ari_rpn | Comments and element value changed |
| Progress_indicator_rx_base | Progress_indicator_rx_base | Element values changed |
| Rand_rx_base | Rand_rx_base | Element value and comments changed |
| Auth_request_rx_base | Auth_request_rx_base | Field value changed |
| Auth_request_rx04 | Auth_request_rx_base | Field name, field value and detailed comments changed |
| Cc_setup_tx_base | Cc_setup_tx_base | Field name, field value and detailed comments changed |
| Cc_setup_tx01 | Cc_setup_tx01 | Field name and field value changed |
| Cc_setup_tx02 | Cc_setup_tx02 | Field value, comments and detailed comments changed |
| Cc_setup_tx04 | Cc_setup_tx04 | Field value and comments changed |
| Cc_setup_ack_rx_base | Cc_setup_ack_rx_base | Field value and comments changed |
| Lce_page_response_tx_base | Lce_page_response_tx_base | comments changed |
| Locate_accept_rx01 | Locate_accept_rx01 | Field name and field value changed |
| Locate_reject_rx_base | Locate_reject_rx_base | Field value and comments changed |
| Locate_request_tx_base | Locate_request_tx_base | Field value and comments changed |
| Locate_request_tx01 | Locate_request_tx01 | Field value changed |
| Locate_request_tx02 | Locate_request_tx02 | Field name and field value changed |

5.5 Test cases impacted by replacements outside of the test case description

Table 6: Test cases impacted by replacements outside of the test case description

| Test Case Index | |
|------------------|---------------|
| Test Case Id TCL | Modified Item |
| | |

6 Additional test cases list

6.1 Test purposes

This subclause includes the all test purposes developed for covering the DECT/GSM IWP NWK layer requirements not included in ETS 300 497-9 [6] or ETS 300 494-3 [8].

6.1.1 Test purposes for Call Control (CC)

6.1.1.1 Outgoing call

Table 7: Outgoing call

| No. | Test purpose | Comment |
|---------------------------------|---|---------|
| (DECT/GSM) TP/FT/CC/BV/OC-10 | Ref: ETS 300 175-5 [1], subclauses 9.3.1.4, 9.3.1.6 ETS 300 370 [3], subclauses 6.1.1.1 b figure 4 Initial state: F-00 Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call, using call set-up with en-block dialling in {CC-INFO} message (received in state F-02). | |
| (DECT/GSM) TP/FT/CC/BV/OC-11 | Ref: ETS 300 175-5 [1], subclauses 9.3.1.4, 9.3.1.6 ETS 300 370 [3], subclauses 6.1.1.1 b Initial state: F-00 Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call, using call set-up with en-block dialling in second {CC-INFO} message (received in state F-02). | |

6.1.1.2 Incoming call

Table 8: Incoming call

| No. | Test purpose | Comment |
|------------------------|--------------|---------|
| No relevant test cases | | |

6.1.1.3 Call release

Table 9: Call release

| No. | Test purpose | Comment |
|---------------------------------|---|---------|
| (DECT/GSM) TP/FT/CC/BV/CR-13 | Ref.: ETS 300 175-5 [1], subclause 9.5.1 ETS 300 370 [3], subclause 6.1.1.5 figure 9 Initial state: F-02 Verify that the IUT is able to perform a IUT(FT) initiated normal release(invoked by the MSC(GSM)). | |
| (DECT/GSM) TP/FT/CC/BV/CR-14 | Ref.: ETS 300 175-5 [1], subclause 9.5.1 ETS 300 370 [3], subclause 6.1.1.5 figure 9 Initial state: F-10 Verify that the IUT is able to perform an IUT(FT) initiated normal release (invoked by the MSC(GSM)). | |
| (DECT/GSM) TP/FT/CC/BV/CR-15 | Ref.: ETS 300 175-5 [1], subclause 9.5.1 ETS 300 370 [3], subclause 6.1.1.5 figure 9 Initial state: F-07 Verify that the IUT is able to perform an IUT(FT) initiated normal release (invoked by the MSC(GSM)). | |
| (DECT/GSM) TP/FT/CC/BV/CR-22 | Ref.: ETS 300 175-5 [1], subclause 9.5.2 ETS 300 370 [3], subclause 6.1.1.7 figure 12 and 13 Initial state: F-02 Verify that the IUT is able to perform a MSC initiated abnormal release ({Release} or {Release Complete} message from MSC). | |
| (DECT/GSM) TP/FT/CC/BV/CR-23 | Ref.: ETS 300 175-5 [1], subclause 9.5.2 ETS 300 370 [3], subclause 6.1.1.7 figure 12 and 13 Initial state: F-10 Verify that the IUT is able to perform a MSC initiated abnormal release ({Release} or {Release Complete} message from MSC). | |
| (DECT/GSM) TP/FT/CC/BV/CR-24 | Ref.: ETS 300 175-5 [1], subclause 9.5.2 ETS 300 370 [3], subclause 6.1.1.7 figure 12 and 13 Initial state: F-07 Verify that the IUT is able to perform a MSC initiated abnormal release ({Release} or {Release Complete} message from MSC). | |
| (DECT/GSM) TP/FT/CC/BV/CR-25 | Ref.: ETS 300 175-5 [1], subclause 9.5.2 ETS 300 370 [3], subclause 6.1.1.8 Initial state: F-02 Verify that the IUT is able to perform a MSC initiated abnormal release ({Abort} message from MSC). | |
| (DECT/GSM) TP/FT/CC/BV/CR-26 | Ref.: ETS 300 370 [3], subclause 6.1.2.8 Initial state: F-02 Verify that the IUT is able to perform a MSC initiated abnormal release ({CM Service reject} message from MSC). | |

6.1.1.4 Timer handling

Table 10: Timer handling

| No. | Test purpose | Comment |
|------------------------|--------------|---------|
| No relevant test cases | | |

6.1.2 Test purposes for Mobility Management (MM)

6.1.2.1 Identity procedures

Table 11: Identity procedures

| No. | Test purpose | Comment |
|---------------------------------|--|---------|
| (DECT/GSM) TP/FT/MM/BV/ID-05 | Ref: ETS 300 175-5 [1], subclause 13.2.1 ETS 300 370 [3], subclauses 6.1.2.2 figure 16 Initial state: ?(selected in PIXIT) Verify that when the basic IUT initiated identity request procedure is invoked by the MSC ({IDENTITY-REQUEST} message with IMSI), the IUT is able to perform this procedure correctly. | |
| (DECT/GSM) TP/FT/MM/BV/ID-06 | Ref: ETS 300 175-5 [1], subclause 13.2.1 ETS 300 370 [3], subclauses 6.1.2.2 figure 16 Initial state: ?(selected in PIXIT) Verify that when the basic IUT initiated identity request procedure is invoked by the MSC ({IDENTITY-REQUEST} message with IPEI), the IUT is able to perform this procedure correctly. | |
| (DECT/GSM) TP/FT/MM/BV/ID-07 | Ref: ETS 300 175-5 [1], subclause 13.2.1 ETS 300 370 [3], subclauses 6.1.2.2 figure 16 Initial state: ?(selected in PIXIT) Verify that when the basic IUT initiated identity request procedure is invoked by the MSC ({IDENTITY-REQUEST} message with TMSI), the IUT is able to perform this procedure correctly. | |
| (DECT/GSM) TP/FT/MM/BV/ID-08 | Ref: ETS 300 175-5 [1], subclause 13.2.2 ETS 300 370 [3], subclauses 6.1.2.5 figure 20 Initial state: ?(selected in PIXIT) Verify that when the basic IUT initiated temporary identity assign procedure is invoked by the MSC ({TMSI_REALLOCATION_COMMAND} message), the IUT is able to perform this procedure correctly. | |

6.1.2.2 Authentication procedures

Table 12: Authentication procedures

| No. | Test purpose | Comment |
|---------------------------------|--|---------|
| (DECT/GSM) TP/FT/MM/BV/AU-07 | Ref: ETS 300 175-5 [1], subclauses 13.3.1 ETS 300 370 [3], subclauses 6.1.2.1 figure 15 Initial state: F-00 Verify that the IUT, after invocation from the MSC, is able to perform the basic operation of the authentication of PT procedure (PT has not stored ZAP value and service class information). | |
| (DECT/GSM) TP/FT/MM/BV/AU-08 | Ref: ETS 300 370 [3], subclauses 6.1.2.1 Initial state: F-00 Verify that the IUT after successful PT authentication procedure (initiated by the MSC) is able to handle an incoming {Authentication reject} message (from the MSC) correctly by sending a {MM-INFO-SUGGEST} message to the PP. | |

6.1.2.3 Location registration procedures

Table 13: Location registration procedures

| No. | Test purpose | Comment |
|---------------------------------|---|---------|
| (DECT/GSM) TP/FT/MM/BV/LO-07 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3, figure 17 Initial state: F-00 Verify that the IUT is able to perform the basic operation of the (GSM related) location registration procedure, requested with an IPUI, when the GSM and the DECT location area changes (broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-08 | Ref.: ETS 300 175-5 [1], subclause 13.4.2 ETS 300 370 [3], subclause 6.1.2.4, figure 19 Initial state: F-00 Verify that the IUT is able to perform the detach procedure (broadcast attributes bit a38 was set to 1, and still is 1). NOT TESTABLE | |
| (DECT/GSM) TP/FT/MM/BV/LO-09 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 Initial state: F-00 Verify that the IUT is able to perform the attach procedure (first attach, broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-10 | Ref.: ETS 300 175-5 [1], subclause 13.4.1, 13.4.2 ETS 300 370 [3], subclause 6.1.2.3, 6.1.2.4 Initial state: F-00 Verify that the IUT is able to perform the basic operation of the GSM location registration procedure (first attach) and, after detach from PP, to perform the attach procedure (ELI equivalent to RFP's LAI) correctly (broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-11 | Ref.: ETS 300 175-5 [1], subclause 13.4.1, 13.4.2 ETS 300 370 [3], subclause 6.1.2.3, 6.1.2.4 Initial state: F-00 Verify that the IUT is able to perform the basic operation of the GSM location registration procedure (first attach) and, after detach from PP, to perform the normal GSM location registration procedure (ELI not equivalent to RFP's LAI) correctly (broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-12 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 Initial state: F-00 Verify that the IUT is able to perform the basic operation of the GSM location registration procedure (first attach) and then to perform the periodic GSM location registration procedure (ELI equivalent to RFP's LAI) correctly (broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-13 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 Initial state: F-00 Verify that the IUT is able to perform the basic operation of the GSM location registration procedure (first attach) and then to perform the normal GSM location registration procedure (ELI not equivalent to RFP's LAI) correctly (broadcast attributes bit a38 was set to 1, and still is 1). | |
| | (continued) | |

Table 13 (concluded): Location registration procedures

| No. | Test purpose | Comment |
|---------------------------------|--|---------|
| (DECT/GSM) TP/FT/MM/BV/LO-14 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 figure 18 Initial state: F-00 Verify that the IUT send back a {LOCATE_REJECT} message (containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate information element contents (<<portable_id>> containing unknown IPU; broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-15 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 figure 18 Initial state: F-00 Verify that the IUT send back a {LOCATE_REJECT} message (containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate information element contents (<<location_area>> containing unknown PLMN; broadcast attributes bit a38 was set to 1, and still is 1). | |
| (DECT/GSM) TP/FT/MM/BV/LO-16 | Ref.: ETS 300 175-5 [1], subclause 13.4.1 ETS 300 370 [3], subclause 6.1.2.3 figure 18 Initial state: F-00 Verify that the IUT send back a {LOCATE_REJECT} message (containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate information element contents (<<location_area>> containing unknown LAC; broadcast attributes bit a38 was set to 1, and still is 1). | |

6.1.2.4 Cipherng procedures**Table 14: Cipherng procedures**

| No. | Test purpose | Comment |
|---------------------------------|--|---------|
| (DECT/GSM) TP/FT/MM/BV/CH-05 | Ref.: ETS 300 175-5 [1], subclause 13.8 ETS 300 370 [3], subclause 6.1.2.6 figure 22 Initial state: ?(selected in PIXIT) Verify that the IUT, after invocation by the MSC, is able to perform the GSM initiated cipher switching procedure ({CIPHER_MODE_COMMAND}) requesting "cipher-on", while no cipherng is active. | |
| (DECT/GSM) TP/FT/MM/BV/CH-06 | Ref.: ETS 300 175-5 [1], subclause 13.8 ETS 300 370 [3], subclause 6.1.2.6 figure 22 Initial state: ?(selected in PIXIT) Verify that the IUT, after invocation by the MSC, is able to perform the GSM initiated cipher switching procedure ({CIPHER_MODE_COMMAND}) requesting "cipher-off", while cipherng is active. | |

6.1.2.5 Timer handling

Table 15: Timer handling

| No. | Test purpose | Comment |
|------------------------------|---|---------|
| (DECT/GSM) TP/FT/MM/TI-11 | Ref.: ETS 300 175-5 [1], subclause 13.2.2 ETS 300 370 [3], subclause 6.1.5.2.1 Initial state: F-00 Verify that the IUT, when during the GSM location registration procedure with TPUI assignment, the timer F-<MM_ident.1> expires after the defined time, aborts the procedure, and thus allows a new GSM location registration procedure to proceed. | |
| (DECT/GSM) TP/FT/MM/TI-12 | Ref.: ETS 300 175-5 [1], subclause 13.2.2 ETS 300 370 [3], subclause 6.1.5.2.1 Initial state: ?(selected in PIXIT) Verify that the IUT, when during the temporary identity assign procedure the timer F-<MM_ident.1> expires after the defined time, aborts the procedure, and thus allows the lower priority procedure {LOCATE_REQUEST} to proceed. | |

6.1.3 Test purposes for Link Control Entity (LCE)

6.1.3.1 Connection oriented link establishment procedures

Table 16

| No. | Test purpose | Comment |
|---------------------------------|---|---------|
| (DECT/GSM) TP/FT/LC/BV/LE-04 | Ref: ETS 300 175-5 [1], subclauses 14.2.1, 14.2.3 ETS 300 370 [3], subclauses 6.1.3 figure 26 Initial state: F-00 Verify that the IUT is able to perform the DECT indirect (paged) FT initiated link establishment procedure after receipt of a {PAGING} message (with IMSI or TMSI) from the MSC. | |

6.1.3.2 Timer handling

Table 17: Timer handling

| No. | Test purpose | Comment |
|------------------------------|--|---------|
| (DECT/GSM) TP/FT/LC/TI-04 | Ref.: ETS 300 175-5 [1], subclause 14.2.3 Initial state: T-00 Verify that the IUT during indirect link establishment (invoked by the MSC) retransmits the {LCE_PAGE_REQUEST} message after a period of <LCE.03> +- 5%. | |

Annex A (normative): Abstract Test Suite (ATS) for NWK testing (DECT/GSM IWP specific)

The ATS is written in TTCN according to ISO/IEC 9646-3 [11].

As the ATS was developed on a separate TTCN tool the TTCN tables are not completely referenced in the contents table. The ATS itself contains a Test Suite Overview (TSO) part which provides additional information and references about the ATS.

NOTE: According to ISO/IEC 9646-3 [23], in case of a conflict in interpretation of the operational semantics of TTCN.GR and TTCN.MP, the operational semantics of the TTCN.GR representation takes precedence.

A.1 The machine processable ATS (TTCN.MP)

The electronic form of the machine processable file (TTCN MP format) corresponding to this ATS is contained in an ASCII text file (DEP7023.MP¹⁾) associated with this ETS.

A.2 The graphical ATS (TTCN.GR)

The graphical ATS is provided in this annex on the following pages.

1) This file is located in a compressed archive file named 7023_EP.LZH. Other file formats are available on request.

I

Test Suite Overview

| Test Suite Structure | | | |
|---|----------------------|--|---------|
| Suite Name : NWK_FT_GSM | | | |
| Standards Ref : ETS 300 370, ETS 300 175 | | | |
| PICS Ref : ETS 300 704-2 | | | |
| PIXIT Ref : ETS 300 497-9 Annex B and ETS 300 702-3 Annex A | | | |
| Test Method(s) : Remote Layer Embedded | | | |
| Comments : This ATS is the TTCN part of ETS 300 702 Part 3, DECT/GSM IWP PTS PSTS Fixed Termination (FT) | | | |
| ETSI Status: This ETS is the ETSI Public Enquiry (PE) version, June 1996 | | | |
| Test Group Reference | Selection Ref | Test Group Objective | Page Nr |
| FT/ | SENG_ft_testing | To check the behaviour of the NWK layer of the FT(IUT) | 154 |
| FT/CC/ | SENG_cc_support | To check the IUT CC-state machine behaviour | 154 |
| FT/CC/BV/ | SENG_cc_support | To tests the CC entity of the IUT in response to syntactically and contextual correct behaviour of the test system | 154 |
| FT/CC/BV/OC/ | SENG_outgoing_call | To check the IUT's behaviours to setup an outgoing call | 154 |
| FT/CC/BV/IC/ | SENG_incoming_call | To check the IUT's behaviours to setup an incoming call | 164 |
| FT/CC/BV/CR/ | SENG_cc_support | To check the IUT's behaviours to release an outgoing/incoming call | 167 |
| FT/CC/TI/ | SENG_cc_support | To verify that the IUT CC timers are with correct values and the IUT is reacting properly to the expiry of a timer | 179 |
| FT/MM/ | SENG_mm_support | To check the behaviour of the Mobility Management entity of the IUT | 186 |
| FT/MM/BV/ | SENG_mm_support | To tests the MM entity of the IUT in response to syntactically and contextual correct behaviour of the test system | 186 |
| FT/MM/BV/ID/ | SENG_identity_procs | To check the IUT's behaviour concerning identity procedures | 186 |
| FT/MM/BV/AU/ | SENG_auth_procs | To check the IUT's behaviour concerning the authentication procedures | 191 |
| FT/MM/BV/LO/ | SENG_location_procs | To check the IUT's behaviour concerning the location procedures | 195 |
| FT/MM/BV/CH/ | SENG_ciphering_procs | To check the IUT's behaviour concerning the ciphering related procedures | 209 |
| FT/MM/TI/ | SENG_mm_support | To verify that the IUT MM timers are with correct values and the IUT is reacting properly to the expiry of a timer | 211 |
| FT/LC/ | SENG_ice_support | To check the behaviour of the LCE of the IUT | 217 |

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| Test Suite Structure | | | |
|-----------------------------|----------------------|---|----------------|
| Test Group Reference | Selection Ref | Test Group Objective | Page Nr |
| FT/LC/BV/ | SENG_ice_support | To tests the LCE of the IUT in response to syntactically and contextual correct behaviour of the test system | 217 |
| FT/LC/BV/LE/ | SENG_ice_co | To check the IUT's behaviour concerning the connection oriented link establishment procedures | 217 |
| FT/LC/TV/ | SENG_ice_support | To verify that the IUT LCE timers are with correct values and the IUT is reacting properly to the expiry of a timer | 218 |
| Detailed Comments : | | | |

| Test Case Index | | | | |
|-----------------------------|---------------------|----------------------|--|----------------|
| Test Group Reference | Test Case Id | Selection Ref | Description | Page Nr |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_07 | SENC_pieewise | Outgoing normal call; F-00 to F-10; piece-wise dialling | 154 |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_08 | SENC_enblock | Outgoing call; F-00 to F-10; en-block dialling in {CC-SETUP} | 156 |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_09 | SENC_emerg_call | Emergency call; with subscription; F-00 to F-10; en-block dialling in {CC-SETUP} | 158 |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_10 | SENC_enblock | Outgoing normal call; F-00 to F-10; en-block dialling in {CC-INFO} | 160 |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_11 | SENC_enblock | Outgoing normal call; F-00 to F-10; en-block dialling in second {CC-INFO} | 162 |
| FT/CC/BV/IC/ | TC_FT_CC_BV_IC_03 | SENC_normal_in_call | Incoming call; F-00, F-06, F-07 to F-10 | 164 |
| FT/CC/BV/IC/ | TC_FT_CC_BV_IC_04 | SENC_normal_in_call | Incoming call; F-00, F-06 directly to F10 | 166 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_13 | SENC_normal_out_call | Outgoing normal call; F-02; IUT initiated normal release (invoked by the MSC) | 167 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_14 | SENC_normal_out_call | Outgoing normal call; F-10; IUT initiated normal release (invoked by the MSC) | 168 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_15 | SENC_normal_in_call | Incoming call; F-07; IUT initiated normal release (invoked by the MSC) | 169 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_16 | SENC_normal_out_call | Outgoing normal call; F-02; PT initiated normal release | 170 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_17 | SENC_normal_out_call | Outgoing normal call; F-10; PT initiated normal release | 171 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_18 | SENC_normal_in_call | Incoming call; F-07; PT initiated normal release | 172 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_19 | SENC_normal_in_call | Incoming call; F-07; PT initiated abnormal release | 172 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_20 | SENC_normal_out_call | Outgoing normal call; F-10; PT initiated abnormal release | 173 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_21 | SENC_normal_in_call | Incoming call; F-06; PT initiated abnormal release | 173 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_22 | SENC_normal_out_call | Outgoing normal call; F-02; IUT initiated abnormal release (invoked by the MSC) | 174 |

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| Test Case Index | | | | |
|----------------------|-------------------|----------------------|---|---------|
| Test Group Reference | Test Case Id | Selection Ref | Description | Page Nr |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_23 | SENC_normal_out_call | Outgoing normal call; F-10; IUT initiated abnormal release (invoked by the MSC) | 175 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_24 | SENC_normal_in_call | Incoming call; F-07; IUT initiated abnormal release (invoked by the MSC) | 176 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_25 | SENC_normal_out_call | Outgoing normal call; F-02; IUT initiated abnormal release (invoked by MSC) after SETUP msg to MSC | 177 |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_26 | SENC_normal_out_call | Outgoing normal call; F-02; IUT initiated abnormal release (invoked by MSC) after unsuccessful CM Service procedure | 178 |
| FT/CC/TI/ | TC_FT_CC_TI_05 | SENC_normal_out_call | Outgoing call; F-02; timer F-<CC.01> expiry (+- 5% margin); IUT sends {CC-RELEASE} | 179 |
| FT/CC/TI/ | TC_FT_CC_TI_06 | SENC_normal_out_call | Outgoing call; F-02; restart of timer F-<CC.01> on receipt of {CC-INFO} | 181 |
| FT/CC/TI/ | TC_FT_CC_TI_07 | SENC_normal_out_call | Outgoing call; F-19; timer F-<CC.02> expiry (+- 5% margin); IUT sends {CC-RELEASE-COM} | 183 |
| FT/CC/TI/ | TC_FT_CC_TI_08 | SENC_normal_in_call | Incoming call; F-06; timer F-<CC.03> expiry (+- 5% margin); IUT sends {CC-RELEASE_COM} | 185 |
| FT/MM/BV/ID/ | TC_FT_MM_BV_ID_05 | SENC_identification | Identity request procedure; IUT (MSC) initiated (with IMSI) | 186 |
| FT/MM/BV/ID/ | TC_FT_MM_BV_ID_06 | SENC_identification | Identity request procedure; IUT (MSC) initiated (with IMEI) | 187 |
| FT/MM/BV/ID/ | TC_FT_MM_BV_ID_07 | SENC_identification | Identity request procedure; IUT (MSC) initiated (with TMSI) | 188 |
| FT/MM/BV/ID/ | TC_FT_MM_BV_ID_08 | SENC_temp_id_assign | Temporary identity assign procedure; IUT (MSC) initiated | 189 |
| FT/MM/BV/AU/ | TC_FT_MM_BV_AU_07 | SENC_pt_auth | Authentication of PT (invoked by MSC); PT has not stored ZAP value and service class info | 191 |
| FT/MM/BV/AU/ | TC_FT_MM_BV_AU_08 | SENC_pt_auth | Authentication of PT (invoked by MSC); Rejection from IUT (MSC) | 193 |

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|----------------------|-------------------|-------------------|---|---------|
| Test Group Reference | Test Case Id | Selection Ref | Description | Page Nr |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_07 | SENC_location_reg | Location registration (GSM related); request with (known) IPUI; Change of GSM and DECT location area | 195 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_09 | SENC_location_reg | Location registration (attach procedure); request with (known) IPUI; no change of GSM and DECT location area | 197 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_10 | SENC_location_reg | Location registration (first attach procedure); request with (known) IPUI; no change of GSM and DECT location area; detach; new attach (request with (known) IPUI, no change of GSM and DECT location area) | 199 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_11 | SENC_location_reg | Location registration (first attach procedure); request with (known) IPUI; no change of GSM and DECT location area; detach; new location registration (request with (known) IPUI, change of GSM and DECT location area) | 200 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_12 | SENC_location_reg | Location registration (first attach procedure); request with (known) IPUI; no change of GSM and DECT location area; periodic location updating procedure (request with (known) IPUI, no change of GSM and DECT location area) | 201 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_13 | SENC_location_reg | Location registration (first attach procedure); request with (known) IPUI; no change of GSM and DECT location area; normal location updating procedure (request with (known) IPUI, change of GSM and DECT location area) | 202 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_14 | SENC_location_reg | Location registration; request with (unknown) IPUI; IUT (MSC) rejects | 203 |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_15 | SENC_location_reg | Location registration; request with (unknown) PLMN; IUT (MSC) rejects | 205 |

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| Test Case Index | | | | |
|----------------------------|-------------------|-----------------------|--|---------|
| Test Group Reference | Test Case Id | Selection Ref | Description | Page Nr |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_16 | SENC_location_reg | Location registration; request with (unknown) LAC; IUT (MSC) rejects | 207 |
| FT/MM/BV/CH/ | TC_FT_MM_BV_CH_06 | SENC_ft_cipher_on | Cipher switching; IUT (MSC) initiated; "cipher-off" to "cipher-on" | 209 |
| FT/MM/BV/CH/ | TC_FT_MM_BV_CH_07 | SENC_ft_cipher_off | Cipher switching; IUT (MSC) initiated; "cipher-on" to "cipher-off" | 210 |
| FT/MM/TI/ | TC_FT_MM_TI_08 | SENC_loc_reg_identif | Identity request (IUT (MSC) initiated); timer F-<MM_ident.2> expiry (+- 5% margin) | 211 |
| FT/MM/TI/ | TC_FT_MM_TI_09 | SENC_pt_auth_loc | Authentication of PT (invoked by MSC); timer F-<MM_auth.1> expiry (+- 5% margin) | 212 |
| FT/MM/TI/ | TC_FT_MM_TI_10 | SENC_ft_cipher_on_loc | Cipher switching; IUT (MSC) initiated; timer F-<MM_cipher.1> expiry (+- 5% margin) | 213 |
| FT/MM/TI/ | TC_FT_MM_TI_11 | SENC_location_reg | Location registration (GSM related); request with (known) IPUI; Change of GSM and DECT location area; timer F-<MM_ident.1> expiry (+- 5% margin) | 214 |
| FT/MM/TI/ | TC_FT_MM_TI_12 | SENC_temp_id_loc | Temporary identity assign procedure; IUT (MSC) initiated; timer F-<MM_ident.1> expiry (+- 5% margin) | 216 |
| FT/LC/BV/LE/ | TC_FT_LC_BV_LE_04 | SENC_link_co_ft_indir | Indirect IUT (MSC) link establishment procedure | 217 |
| FT/LC/TI/ | TC_FT_LC_TI_04 | SENC_link_co_ft_indir | Indirect IUT (MSC) initiated link establishment; no answer; timer <LCE.3> expiry (+- 5% margin) | 218 |
| Detailed Comments : | | | | |

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| Detailed Comments : | | | |

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| Default Group Reference | Default Id | Description | Page Nr |
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| Detailed Comments : | | | |

II

Declarations Part

| Simple Type Definitions | | | |
|-------------------------------|--------------------------------------|--|---|
| Type Name | Type Definition | Comments | |
| BIT_1 | BITSTRING[1] | GENERAL SIMPLE TYPE DEFINITIONS: | |
| BIT_2 | BITSTRING[2] | | |
| BIT_3 | BITSTRING[3] | | |
| BIT_4 | BITSTRING[4] | | |
| BIT_5 | BITSTRING[5] | | |
| BIT_6 | BITSTRING[6] | | |
| BIT_7 | BITSTRING[7] | | |
| BIT_8 | BITSTRING[8] | | |
| BIT_16 | BITSTRING[16] | | |
| BIT_32 | BITSTRING[32] | | |
| BIT_64 | BITSTRING[64] | | |
| BIT_128 | BITSTRING[128] | | |
| DECT_1 | OCTETSTRING[1] | | |
| DECT_1_253 | OCTETSTRING[1 .. 253] | | |
| DECT_1_254 | OCTETSTRING[1 .. 254] | | |
| DECT_1_255 | OCTETSTRING[1 .. 255] | | |
| INT_8 | INTEGER(0 .. 255) | | |
| HEX_1 | HEXSTRING[1] | | Hexstrings shall only be used when the length of the string is odd. |
| OCT_1 | OCTETSTRING[1] | | |
| OCT_2 | OCTETSTRING[2] | | |
| OCT_4 | OCTETSTRING[4] | | |
| OCT_7 | OCTETSTRING[7] | | |
| OCT_1_13 | OCTETSTRING[1 .. 13] | | |
| OCT_1_14 | OCTETSTRING[1 .. 14] | | |
| OCT_1_16 | OCTETSTRING[1 .. 16] | | |
| OCT_1_20 | OCTETSTRING[1 .. 20] | | |
| OCT_1_254 | OCTETSTRING[1 .. 254] | | |
| OCT_1_257 | OCTETSTRING[1 .. 257] | | |
| CCSTATE_TYPE | INTEGER(0, 1, 2, 3, 4, 6, 7, 10, 19) | Used in PR_select_state | |
| CIPHER_STATUS | INTEGER(0, 1) | Used in DL_ENCRYPT primitive | |
| CLUSTER_ADDRESS_LIST | OCTETSTRING | Used in DL_BROADCAST primitive | |
| CONNECTION_IDENTITY | OCTETSTRING | Used in DL_ENCRYPT primitive | |
| CPN_LENGTH_TYPE | INTEGER(1 .. 14) | Type for length of called party number | |
| DATA_LINK_ENDPOINT_IDENTIFIER | INTEGER | Nr of bits to be specified by test system manufacturer. | |
| ENCRYPTION_KEY | BITSTRING[64] | Used in DL_ENC_KEY primitive | |
| ESTABLISH_MODE | INTEGER(0, 1, 2) | Used in DL_ESTABLISH primitive | |
| FIXED_ID_VALUE_TYPE | BITSTRING[8 .. 72] | The FIXED_ID_VALUE_TYPE is a type for the value of the fixed_id. It is NOT the fixed_id type. The value of the fixed_id can lie between 1 and 9 octets | |
| MESSAGE_TYPE | OCT_1 | ETS 300 175-5 [5], subclause 7.4 | |
| MMPROC_TYPE | INTEGER(0 .. 10) | Used in PR_select_state | |

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| Simple Type Definitions | | |
|----------------------------|---------------------|---|
| Type Name | Type Definition | Comments |
| LCE_HEADER | HEX_1 | ETS 300 175-5 [5], subclause 8.2 |
| PORT_ID_VALUE_TYPE | BITSTRING[8 .. 104] | The PORT_ID_VALUE_TYPE is a type for the value of the portable_id. It is NOT the portable_id type. The value of the portable_id can lie between 1 and 13 octets |
| RADIO_FIXED_PART_NUMBER | INTEGER | Used in DL_ESTABLISH primitive |
| RELEASE_MODE | INTEGER(0, 1) | Used in DL_RELEASE primitive |
| TRANS_FLAG | INTEGER(0, 1) | Used in transaction flag definition |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : AUTH_TYPE | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.4 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| auth_algo_id | OCT_1 | |
| prop_algo_id | OCT_1 | |
| auth_key_number | BIT_4 | |
| auth_key_type | BIT_4 | |
| cipher_key_number | BIT_4 | |
| upc | BIT_1 | |
| txc | BIT_1 | |
| f5 | BIT_1 | '0' |
| inc | BIT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : BASIC_SERVICE | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.4 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| basic_service | BIT_4 | |
| call_class | BIT_3 | |
| f2 | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : CALL_ATTRIBUTES | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.5 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| network_layer_attributes | BIT_5 | |
| coding_standard | BIT_2 | |
| f3 | BIT_1 | '1'B |
| c_plane_routing | BIT_4 | |
| c_plane_class | BIT_3 | |
| f4 | BIT_1 | '1'B |
| lu_id | BIT_5 | |
| u_plane_symmetry | BIT_2 | |
| ext5 | BIT_1 | |
| lu_id_f_p | BIT_5 | |
| f5a | BIT_3 | '100' |
| u_plane_frame_type | BIT_4 | |
| u_plane_class | BIT_3 | |
| ext6 | BIT_1 | |
| u_plane_frame_type_f_p | BIT_4 | |
| u_plane_class_f_p | BIT_3 | |
| f6a | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : CALL_ID | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.6 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| pd | BIT_4 | |
| tv | BIT_3 | |
| ext3a | BIT_1 | |
| extended_transaction_value | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : CALLED_PARTY_NUMBER | | |
| Comments : ETS 300 175 [5], subclause 7.7.7 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| numbering_plan_id | BIT_4 | |
| number_type | BIT_3 | |
| f3 | BIT_1 | '1' |
| called_party_address | DECT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : CALLED_PARTY_SUBADDRESS | | |
| Comments : ETS 300 175 [5], subclause 7.7.8 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| spare | BIT_3 | '000' |
| o_e | BIT_1 | |
| subaddress_type | BIT_3 | |
| f3 | BIT_1 | '1' |
| subaddress_info | OCT_1_20 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : CALLING_PARTY_NUMBER | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.9 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| numbering_plan_id | BIT_4 | |
| number_type | BIT_3 | |
| ext3 | BIT_1 | |
| screening_indicator | BIT_2 | |
| spare | BIT_3 | '000' |
| presentation_indicator | BIT_2 | |
| f3a | BIT_1 | '1' |
| calling_party_address | DECT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : CIPHER_INFO | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.10 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| cipher_algo_id | BIT_7 | |
| y_n | BIT_1 | |
| prop_algo_id | OCT_1 | |
| cipher_key_number | BIT_4 | |
| cipher_key_type | BIT_4 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : CONNECTION_ATTRIBUTES | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.11 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| connection_id | BIT_4 | |
| symmetry | BIT_3 | |
| f3 | BIT_1 | '1'B |
| target_bearers_p_f | BIT_5 | |
| f4 | BIT_2 | '00' |
| ext4 | BIT_1 | |
| min_bearers_p_f | BIT_5 | |
| f4a | BIT_2 | '01' |
| ext4a | BIT_1 | |
| target_bearers_f_p | BIT_5 | |
| f4b | BIT_2 | '10' |
| ext4b | BIT_1 | |
| min_bearers_f_p | BIT_5 | |
| f4c | BIT_3 | '111' |
| mac_service | BIT_4 | |
| slot_size | BIT_3 | |
| ext5 | BIT_1 | |
| mac_service_f_p | BIT_4 | |
| f5a | BIT_4 | '1000' |
| mac_packet_lifetime | BIT_4 | |
| cf_channel_attributes | BIT_3 | |
| ext6 | BIT_1 | |
| mac_packet_lifetime_f_p | BIT_4 | |
| cf_channel_attributes_f_p | BIT_3 | |
| f6a | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|---------------------------|
| Type Name : CONNECTION_ID | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.12 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| u_and_c_id | OCT_1_16 | max number of connections |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|------------|
| Type Name : DELIMITER_REQUEST | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.2 | | |
| Element Name | Type Definition | Comments |
| delimiter_request | OCT_1 | '10100010' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : DURATION | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.13 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| time_limits | BIT_4 | |
| lock_limits | BIT_3 | |
| ext3 | BIT_1 | |
| time_duration | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : END_TO_END_COMPATIBILITY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.14 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| user_rate | BIT_5 | |
| negotiation | BIT_1 | |
| s_a | BIT_1 | |
| ext3 | BIT_1 | |
| v110_x30_service | BIT_7 | |
| ext3a | BIT_1 | |
| parity | BIT_3 | |
| data_bits | BIT_2 | |
| stop_bits | BIT_2 | |
| ext3b | BIT_1 | |
| modem_type | BIT_6 | |
| duplex | BIT_1 | |
| f3c | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : FACILITY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.15 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | '100' |
| length | OCT_1 | |
| service_discriminator | BIT_5 | |
| f3 | BIT_3 | |
| component | OCT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : FEATURE_ACTIVATE | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.16 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | '1' |
| length | OCT_1 | |
| feature | BIT_7 | |
| ext3 | BIT_1 | |
| parameter | BIT_7 | |
| f3a | BIT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : FEATURE_INDICATE | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.17 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | '1' |
| length | OCT_1 | |
| feature | BIT_7 | |
| ext3 | BIT_1 | |
| parameter | BIT_7 | |
| f3a | BIT_1 | |
| status_indicator | OCT_1 | |
| component | DECT_1_253 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|---------------------|----------|
| Type Name : FIXED_ID | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.18 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| type | BIT_7 | |
| f3 | BIT_1 | '1' |
| length_of_id_value | BIT_7 | |
| f4 | BIT_1 | '1' |
| id_value | FIXED_ID_VALUE_TYPE | 1) |
| Detailed Comments : 1) The FIXED_ID_VALUE_TYPE refers to the type of the id_value The id_value can consist of: <ul style="list-style-type: none"> - ARI (ARC + ARD) - ARI (ARC + ARD) + RPN - PARK | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : IDENTITY_TYPE | | |
| Comments : ETSI 300 175-5 [5], subclause 7.7.19 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| id_group | BIT_4 | |
| space | BIT_3 | '000' |
| f3 | BIT_1 | '1' |
| type | BIT_7 | |
| f4 | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : INFO_TYPE | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.20 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| info_parameter | OCT_1_13 | |
| Detailed Comments : | | |

Structured Type Definition

Type Name : IWU_ATTRIBUTES

Comments : ETS 300 175-5 [5], subclause 7.7.21

| Element Name | Type Definition | Comments |
|--------------------------|-----------------|----------|
| iei | OCT_1 | |
| length | OCT_1 | |
| info_transfer_capability | BIT_5 | |
| coding_standard | BIT_2 | |
| f3 | BIT_1 | '1'B |
| external_connection_type | BIT_4 | |
| negotiation_indicator | BIT_3 | |
| f4 | BIT_1 | '1'B |
| info_transfer_rate | BIT_5 | |
| trans_mode | BIT_2 | |
| ext5 | BIT_1 | |
| rate_multiplier | BIT_5 | |
| unit_rate | BIT_2 | |
| ext5a | BIT_1 | |
| establishment | BIT_2 | |
| configuration | BIT_2 | |
| structure | BIT_3 | |
| ext5b | BIT_1 | |
| info_transfer_rate_d_o | BIT_5 | |
| symmetry | BIT_2 | |
| ext5c | BIT_1 | |
| rate_multiplier_d_o | BIT_5 | |
| unit_rate_d_o | BIT_2 | |
| f5d | BIT_1 | '1' |
| user_protocol_id | BIT_5 | |
| f6 | BIT_2 | '00' |
| ext6 | BIT_1 | |
| l3_protocol_id | BIT_5 | |
| f7 | BIT_2 | '11' |
| ext7 | BIT_1 | |
| l2_protocol_id | BIT_5 | |
| f8 | BIT_2 | '10' |
| ext8 | BIT_1 | |

Detailed Comments :

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : IWU_PACKET | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.22 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| l2_protocol_id | BIT_5 | |
| f3 | BIT_1 | '0' |
| s_r | BIT_1 | |
| ext3 | BIT_1 | |
| l3_protocol_id | BIT_5 | |
| f3a | BIT_3 | '111' |
| info | OCT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : IWU_TO_IWU | | |
| Comments : ETS 300 175-5 [5] (second edition), subclause 7.7.23 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| protocol_discriminator | BIT_6 | |
| s_r | BIT_1 | |
| f3 | BIT_1 | '1' |
| discriminator_type | BIT_7 | |
| f4 | BIT_1 | '1' |
| discriminator | OCT_2 | |
| contents | OCT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : KEY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.24 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| key_type | OCT_1 | |
| key_data | OCT_1_254 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|---|
| Type Name : LOCATION_AREA | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.25 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | '1111' if GSM loc. info is not included |
| length | OCT_1 | |
| location_area_level | BIT_6 | |
| li_type | BIT_2 | |
| spare | BIT_4 | |
| eli_type | BIT_4 | |
| extended_location_information | OCT_7 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : MULTI_DISPLAY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.26 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| display_info | DECT_1_255 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : MULTI_KEYPAD | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.27 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| keypad_info | DECT_1_255 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|--------------------------------------|
| Type Name : NETWORK_ASSIGNED_ID | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.28 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| type | BIT_7 | |
| f3 | BIT_1 | '1' |
| id_length | BIT_7 | |
| f4 | BIT_1 | '1' |
| value | BIT_32 | 4 octet GSM TMSI has to be supported |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : NETWORK_HEADER | | |
| Comments : ETS 300 175-5 [5], subclause 7.1, 7.2, 7.3 | | |
| Element Name | Type Definition | Comments |
| protocol_discriminator | BIT_4 | |
| transaction_value | BIT_3 | |
| transaction_flag | BIT_1 | |
| ext_transaction_flag | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|--------------------------------|
| Type Name : NETWORK_PARAMETER | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.29 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| discriminator | BIT_8 | |
| data_field | OCT_1_254 | for GSM handover ref.- 1 octet |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|--------------------|----------|
| Type Name : PORTABLE_ID | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.30 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| type | BIT_7 | |
| f3 | BIT_1 | '1' |
| length_of_id_value | BIT_7 | |
| f4 | BIT_1 | '1' |
| id_value | PORT_ID_VALUE_TYPE | 1) |
| Detailed Comments : 1) The PORT_ID_VALUE_TYPE refers to the type of the id_value The id_value can consist of: <ul style="list-style-type: none"> - IPUI (S, O, T, P, Q, U, R), - IPEI, - TPUI | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : PROGRESS_INDICATOR | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.31 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| location | BIT_4 | |
| coding_standard | BIT_3 | |
| f3 | BIT_1 | '1' |
| progress_description | BIT_7 | |
| f4 | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|---------------------------|
| Type Name : RAND | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.31 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| field | BIT_64 | for DSAA : BITSTRING [64] |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : RATE_PARAMETERS | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.33 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| class_of_service | BIT_4 | |
| interleaving | BIT_1 | |
| symmetry | BIT_2 | |
| f3 | BIT_1 | '1' |
| channel1_arrangement_ptof | BIT_4 | |
| channel1_rate_ptof | BIT_3 | |
| ext4 | BIT_1 | |
| channel1_arrangement_ftop | BIT_4 | |
| channel1_rate_ftop | BIT_3 | |
| f4a | BIT_1 | '1' |
| channel2_arrangement_ptof | BIT_4 | |
| channel2_rate_ptof | BIT_3 | |
| ext5 | BIT_1 | |
| channel2_arrangement_ftop | BIT_4 | |
| channel2_rate_ftop | BIT_3 | |
| f5a | BIT_1 | '1' |
| channel3_arrangement_ptof | BIT_4 | |
| channel3_rate_ptof | BIT_3 | |
| ext6 | BIT_1 | |
| channel3_arrangement_ftop | BIT_4 | |
| channel3_rate_ftop | BIT_3 | |
| f6a | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : REJECT_REASON | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.34 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| reason | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : RELEASE_REASON | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.7 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| reason | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : REPEAT_INDICATOR | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.3 | | |
| Element Name | Type Definition | Comments |
| repeat_indicator | HEX_1 | |
| f1 | BIT_4 | '1101' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------------------------|
| Type Name : RES | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.35 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| field | BIT_32 | for DSAA: BITSTRING [32] |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|-----------------------------|
| Type Name : RS | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.36 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| field | BIT_64 | for DSAA : BITSTRING [64] |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|------------|
| Type Name : SENDING_COMPLETE | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.2 | | |
| Element Name | Type Definition | Comments |
| sending_complete | OCT_1 | '10100001' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : SERVICE_CLASS | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.39 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| service_class_field | BIT_8 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : SETUP_CAPABILITY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.40 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| page | BIT_2 | |
| setup | BIT_2 | |
| f3 | BIT_3 | '000' |
| ext3 | BIT_1 | |
| profile_indicator | BIT_3 | |
| f3a | BIT_5 | '10000' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : SHORT_FORMAT_ADDRESS | | |
| Comments : ETS 300 175-5 [5], subclause 8.2.1 | | |
| Element Name | Type Definition | Comments |
| lce_header | BIT_3 | |
| w | BIT_1 | |
| f1 | HEX_1 | xxxx |
| tpui_address | BIT_16 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : SIGNAL | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.8 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| signal_value | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : SINGLE_DISPLAY | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.5 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| display_info | DECT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : SINGLE_KEYPAD | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.6 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| keypad_info | DECT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|------------|
| Type Name : TERMINAL_CAPABILITY | | |
| Comments : ETS 300 175-5 [5], (second edition), subclause 7.7.41 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| display_capability | BIT_4 | |
| tone_capability | BIT_3 | |
| ext3 | BIT_1 | |
| extended_character | BIT_7 | |
| ext3a | BIT_1 | |
| a_vol | BIT_2 | |
| n_rej | BIT_2 | |
| echo_param | BIT_3 | |
| ext3b | BIT_1 | |
| slot_type_capability | BIT_7 | |
| ext3c | BIT_1 | |
| number_of_stored_display_chars_ms | BIT_7 | |
| ext3d | BIT_1 | |
| number_of_stored_display_chars_ls | BIT_7 | |
| ext3e | BIT_1 | |
| number_of_lines_in_display | BIT_7 | |
| ext3f | BIT_1 | |
| number_of_characters_per_line | BIT_7 | |
| ext3g | BIT_1 | |
| display_behaviour_field | BIT_7 | |
| ext3h | BIT_1 | |
| f3d | OCT_1 | '10000000' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : TEST_HOOK_CONTROL | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.10 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| hook_value | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|--|-----------------|----------|
| Type Name : TIMER_RESTART | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.9 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| restart_value | OCT_1 | |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : TRANSIT_DELAY | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.42 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| forward_delay | BIT_6 | |
| f3 | BIT_2 | '10' |
| backward_delay | BIT_6 | |
| f4 | BIT_2 | '10' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : WINDOW_SIZE | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.43 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| forward_value | BIT_7 | |
| f3 | BIT_1 | '1' |
| backward_value | BIT_7 | |
| f4 | BIT_1 | '1' |
| Detailed Comments : | | |

| Structured Type Definition | | |
|---|-----------------|----------|
| Type Name : ZAP_FIELD | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.44 | | |
| Element Name | Type Definition | Comments |
| iei | OCT_1 | |
| length | OCT_1 | |
| contents | BIT_4 | |
| f3 | BIT_4 | '0000' |
| Detailed Comments : | | |

| Test Suite Operation Definition | |
|---|---|
| Operation Name | : TSO_algos_dck_from_gsm(rand:BIT_128; uak_ac:BIT_128) |
| Result Type | : BIT_64 |
| Comments | : Authentication key selection algorithm from GSM. Used to calculate the derived ciphering key. |
| Description | |
| | |
| Detailed Comments : algorithm according to GSM 04.08 and 12.03 | |

| Test Suite Operation Definition | |
|---|---|
| Operation Name | : TSO_algos_dck_from_gsm_kc |
| Result Type | : BIT_64 |
| Comments | : Cipher key mapping from GSM. Used to calculate the derived ciphering key. |
| Description | |
| | |
| Detailed Comments : Algorithm according to ETS 300 370[12] Annex A | |

| Test Suite Operation Definition | |
|---|---|
| Operation Name | : TSO_algos_res_from_gsm(rand: BIT_128; uak_ac : BIT_128) |
| Result Type | : BITSTRING |
| Comments | : Authentication key selection algorithm from GSM. Used to calculate res. |
| Description | |
| | |
| Detailed Comments : algorithm according to GSM 04.08 | |

| Test Suite Operation Definition | |
|--------------------------------------|--|
| Operation Name | : TSO_algos_res_add_1(res: BIT_32) |
| Result Type | : BITSTRING |
| Comments | : Used to calculate an invalid res (res + 1) |
| Description | |
| Returns the new (invalid) res value! | |
| new_res := old_res + 1; | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|-----------------------------------|
| Operation Name | : TSO_check_u_plane |
| Result Type | : BOOLEAN |
| Comments | : To check if U-plane is present. |
| Description | |
| <p>TSO_check_u_plane is an operation to detect the U-plane connection. The acoustical path will be checked in both directions by two tone generators. The result of the operation is a boolean value which indicates the condition of the U_plane.</p> <p>TSO_check_u_plane = TRUE, when U_plane is connected. TSO_check_u_plane = FALSE, when U_plane is not connected.</p> | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|---|
| Operation Name | : TSO_get_one_digit(digit_string : OCT_1_14; n : INTEGER) |
| Result Type | : DECT_1 |
| Comments | : To get the n'th digit from a character string. |
| Description | |
| <p>TSO_get_one_digit(digit_string, n)</p> <p>Returns the n'th character value from a character digit_string. The digit_string can be e.g. called_party_number.</p> <p>e.g.:</p> <pre>TSPX_called_nr:= 514411; n := 0; => TSO_get_one_digit(TSPX_called_nr, 0) = 5</pre> | |
| Detailed Comments : As the definition of an array is not possible in TTCN, this operator simulates an array. | |

| Test Suite Operation Definition | |
|--|--|
| Operation Name | : TSO_init_broadcast_bits |
| Result Type | : BOOLEAN |
| Comments | : The set the value of the broadcasted "higher layer capabilities" bits(Standard ciphering supported, location registration supported and SIM services available). |
| Description | |
| <p>A37 will be set to 1 A38 will be set to 1 A39 will be set to 1 The result of the operation will be TRUE, assuming that the operation has been completed successfully.</p> | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|---|
| Operation Name | : TSO_int_to_oct_1(param : INT_8) |
| Result Type | : OCT_1 |
| Comments | : This operator will convert an integer value, not higher than 255 (8 bits) into an octetstring of 1. The coding will be the natural binary value, unsigned. |
| Description | |
| Convert an integer value, not higher than 255 (8 bits) into an octetstring of 1. The coding will be the natural binary value, unsigned. | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|---|
| Operation Name | : TSO_ipui_last_20_bits(param : PORT_ID_VALUE_TYPE) |
| Result Type | : PORT_ID_VALUE_TYPE |
| Comments | : This operator will extract the last 20 bits of a given IPU. |
| Description | |
| | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|---|
| Operation Name | : TSO_nw_ass_id_present(nwk_pdu:PDU) |
| Result Type | : BOOLEAN |
| Comments | : To check if network_assigned_id is present in a NWK L3 message. |
| Description | |
| TSO_nw_ass_id_present = TRUE, when the NWK L3 message contains a network_assigned_id TSO_nw_ass_id_present = FALSE, when the NWK L3 message contains no network_assigned_id | |
| Detailed Comments : | |

| Test Suite Operation Definition | |
|--|--|
| Operation Name | : TSO_rel_reason_present(nwk_pdu:PDU) |
| Result Type | : BOOLEAN |
| Comments | : To check if release_reason is present in a NWK L3 message. |
| Description | |
| TSO_rel_reason_present = TRUE, when a NWK L3 message contains a release_reason TSO_rel_reason_present = FALSE, when a NWK L3 message contains no release_reason | |
| Detailed Comments : | |

| Test Suite Parameter Declarations | | | |
|-----------------------------------|-----------------------------------|---|--|
| Parameter Name | Type | PICS/PIXIT Ref | Comments |
| TSPC_auth_procs | BOOLEAN | | |
| TSPC_cc_support | BOOLEAN | | |
| TSPC_cipherring_procs | BOOLEAN | | |
| TSPC_emerg_call | BOOLEAN | | |
| TSPC_enblock | BOOLEAN | | |
| TSPC_ft_cipher_off | BOOLEAN | | |
| TSPC_ft_cipher_on | BOOLEAN | | |
| TSPC_identification | BOOLEAN | | |
| TSPC_identity_procs | BOOLEAN | | |
| TSPC_incoming_call | BOOLEAN | | |
| TSPC_ice_co | BOOLEAN | | |
| TSPC_ice_support | BOOLEAN | | |
| TSPC_link_estab_co_ft_indi r | BOOLEAN | | |
| TSPC_link_release | BOOLEAN | | |
| TSPC_location_procs | BOOLEAN | | |
| TSPC_location_reg | BOOLEAN | | |
| TSPC_mm_support | BOOLEAN | | |
| TSPC_normal_call | BOOLEAN | | |
| TSPC_piecewise | BOOLEAN | | |
| TSPC_pt_auth | BOOLEAN | | |
| TSPC_outgoing_call | BOOLEAN | | |
| TSPC_store_dck | BOOLEAN | | |
| TSPC_temp_id_assign | BOOLEAN | | |
| TSPC_user_auth | BOOLEAN | | |
| TSPX_dlei_value | DATA_LINK_ENDPOINT_ID ENTIFIER | PIXIT Question B.8.4 | Value of data link endpoint identifier to be used in the testsystem (local testsystem matter) |
| TSPX_ipei_value | PORT_ID_VALUE_TYPE | PIXIT Question B.8.5 Ref. ETS 300 175 [5], subclause 7.7.30 | Value of IPEI (IPUI-N) to be sent tot the FT (IUT) (before subscription) |
| TSPX_ari_value | FIXED_ID_VALUE_TYPE | PIXIT Question B.8.2 Ref. ETS 300 175-5[7.7.18] | Values to be specified by the manufacturer: Value of fixed_id to be used in case of ARI. |
| TSPX_ari_rpn_value | FIXED_ID_VALUE_TYPE | PIXIT Question B.8.3 Ref. ETS 300 175 [5], subclause 7.7.18 | Value of fixed_id to be used in case of ARI D+ RPN |
| TSPX_called_party_number | OCT_1_14 | PIXIT Question B.7.1 | The called party number to be dialled by the PT (LT) in oder to get connection to the network. For practical reasons, the number is limited to 14 digits, |

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| Test Suite Parameter Declarations | | | |
|---|---------------------|---|---|
| Parameter Name | Type | PICS/PIXIT Ref | Comments |
| TSPX_extended_location_in formation_unknown_lac | OCT_7 | PIXIT Question DE/RES-03025 A.3 Table 23, No. 1 Ref. ETS 300 370 [12], subclause 6.1.8.2.12 and ETS 300 175 [5], subclause 7.7.25 | Value of ELI to be used(ELI includes MCC, MNC, LAC and CI) with unknown LAC |
| TSPX_extended_location_in formation_unknown_plmn | OCT_7 | PIXIT Question DE/RES-03025 A.3 Table 23, No. 2 Ref. ETS 300 370 [12], subclause 6.1.8.2.12 and ETS 300 175 [5], subclause 7.7.25 | Value of ELI to be used(ELI includes MCC, MNC, LAC and CI) with unknown PLMN(wrong MNC) |
| TSPX_ipui_value | PORT_ID_VALUE_TYPE | PIXIT Question B.8.6 Ref. ETS 300 175 [5], subclause 7.7.30 | Value of IPUI to be used by the PT (LT) (after subscription). The value shall include the PUT (IPUI Type R(value '0100')) and the IMSI |
| TSPX_location_area_level | BIT_6 | PIXIT Question B.8.7 Ref. ETS 300 175 [5], subclause 7.7.25 | The location area level that is going to be used. |
| TSPX_mmproc_aupt_ccstat e | CCSTATE_TYPE | PIXIT Question B.7.2 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the FT cc state, the authentication of PT testcases shall be tested in. |
| TSPX_mmproc_cift_ccstate | CCSTATE_TYPE | PIXIT Question B.7.4 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the FT cc state, the FT init. ciphering testcases shall be tested in. |
| TSPX_mmproc_idpt_ccstate | CCSTATE_TYPE | PIXIT Question B.7.5 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the FT cc state, the id. of PT testcases shall be tested in. |
| TSPX_nr_of_digits_in_cpn | CPN_LENGTH_TYPE | PIXIT Question B.7.15 | This parameter is related to parameter TSPX_called_party_number. It specifies the actual number of digits present in the cpn. |
| TSPX_mmproc_aupt_invoke | MMPROC_TYPE | PIXIT Question B.7.9 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the way of invoking the authentication of PT proc. |
| TSPX_mmproc_cift_invoke | MMPROC_TYPE | PIXIT Question B.7.11 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the way of invoking the FT init. ciphering procedure. |
| TSPX_mmproc_idpt_invoke | MMPROC_TYPE | PIXIT Question B.7.12 Ref. ETS 300 175 [5], subclause 13.5 | Indicates the way of invoking the id. of PT procedure. |
| TSPX_park_value | FIXED_ID_VALUE_TYPE | PIXIT Question B.8.8 Ref. ETS 300 175 [5], subclause 7.7.18 | Value of fixed_id to be used in case of PARK |
| TSPX_tpui_value | PORT_ID_VALUE_TYPE | PIXIT Question B.8.9 Ref. ETS 300 175 [5], subclause 7.7.30 | Value of TPUI to be used by the PT (LT) |

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| Test Suite Parameter Declarations |
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| |
|---|
| <p>Detailed Comments : 1) The PIXIT parameters TSPX_mmproc_xxxx_ccstate can be used to specify the CC state, the IUT shall be in, when a certain MM procedure is tested.</p> <p>2) The PIXIT parameters TSPX_mmproc_xxxx_invoke can be used to specify the means of invocation of a certain MM procedure. If the parameter is 0, a standard implicit send statement is used. In other cases, a manufacturer specific protocol invocation can be specified.</p> |
|---|

| Test Case Selection Expression Definitions | | |
|--|--|--|
| Expression Name | Selection Expression | Comments |
| SENG_auth_procs | TSPC_mm_support AND TSPC_auth_procs | Are authentication procedures supported |
| SENG_cc_support | TSPC_cc_support | Is Call Control supported |
| SENG_cipherring_procs | TSPC_mm_support AND TSPC_cipherring_procs | Are cipherring related procedures supported. |
| SENG_ft_testing | TRUE | Are we testing the FT |
| SENG_identity_procs | TSPC_mm_support AND TSPC_identity_procs | Are identity procedures supported |
| SENG_incoming_call | TSPC_cc_support AND TSPC_incoming_call | Is incoming call establishment, maintenance and release supported |
| SENG_ice_co | TSPC_ice_support AND TSPC_ice_co | Are connection oriented link establishment, maintenance and release supported |
| SENG_ice_support | TSPC_ice_support | Is Link Control Entity supported |
| SENG_location_procs | TSPC_mm_support AND TSPC_location_procs | Are location procedures supported |
| SENG_mm_support | TSPC_mm_support | Is Mobility Management supported |
| SENG_outgoing_call | TSPC_cc_support AND TSPC_outgoing_call | Is outgoing call establishment, maintenance and release supported |
| SENC_emerg_call | TSPC_cc_support AND TSPC_outgoing_call AND TSPC_emerg_call | Is emergence outgoing call establishment, maintenance and release supported |
| SENC_enblock | TSPC_cc_support AND TSPC_outgoing_call AND TSPC_enblock | Is sending the called party number in enblock way (in a <<Called-party-number>> I.E.) supported |
| SENC_ft_cipher_off | TSPC_mm_support AND TSPC_ft_cipher_off | Is FT initiated cipher off procedure supported |
| SENC_ft_cipher_on | TSPC_mm_support AND (TSPC_pt_auth OR TSPC_user_auth) AND TSPC_store_dck AND TSPC_ft_cipher_on | Is FT initiated cipher on procedure supported |
| SENC_ft_cipher_on_loc | TSPC_mm_support AND TSPC_ft_cipher_on AND TSPC_location_reg | Are FT cipher on and location registration procedure supported |
| SENC_identification | TSPC_mm_support AND TSPC_identification | Is identification of PT procedure supported |
| SENC_link_co_ft_indir | TSPC_ice_support AND TSPC_link_estab_co_ft_indir AND TSPC_link_release | Are connection oriented indirect FT initiated link establishment and link release procedures supported |
| SENC_loc_reg_identif | TSPC_mm_support AND TSPC_location_reg AND TSPC_identification | Are location registration and identification procedures supported |
| SENC_location_reg | TSPC_mm_support AND TSPC_location_reg | Is location registration procedure supported |
| SENC_normal_in_call | TSPC_cc_support AND TSPC_incoming_call AND TSPC_normal_call | Is normal incoming call establishment, maintenance and release supported |

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| Test Case Selection Expression Definitions | | |
|--|---|---|
| Expression Name | Selection Expression | Comments |
| SENC_normal_out_call | TSPC_cc_support AND TSPC_outgoing_call AND TSPC_normal_call | Is normal outgoing call establishment, maintenance and release supported |
| SENC_pieewise | TSPC_cc_support AND TSPC_outgoing_call AND TSPC_pieewise | Is sending the called party number in pieewise way (in a <<Keypad>> I.E.) supported |
| SENC_pt_auth | TSPC_mm_support AND TSPC_pt_auth | Are PT authentication procedure supported |
| SENC_pt_auth_loc | TSPC_mm_support AND TSPC_pt_auth AND TSPC_location_reg | Are PT authentication and location registration procedure supported |
| SENC_temp_id_assign | TSPC_mm_support AND TSPC_temp_id_assign | Is temporary identity assign procedure supported |
| SENC_temp_id_loc | TSPC_mm_support AND TSPC_temp_id_assign AND TSPC_location_reg | Is temporary identity assign and location registration procedure supported |
| Detailed Comments : | | |

| Test Suite Constant Declarations | | | |
|----------------------------------|--------------|-------|----------|
| Constant Name | Type | Value | Comments |
| TSC_iei_auth_type | OCT_1 | '0A'O | |
| TSC_iei_basic_service | OCT_1 | 'E0'O | |
| TSC_iei_call_attributes | OCT_1 | '13'O | |
| TSC_iei_call_id | OCT_1 | '1A'O | |
| TSC_iei_called_party_number | OCT_1 | '70'O | |
| TSC_iei_called_party_subaddress | OCT_1 | '71'O | |
| TSC_iei_calling_party_number | OCT_1 | '6C'O | |
| TSC_iei_cipher_info | OCT_1 | '19'O | |
| TSC_iei_connection_id | OCT_1 | '1B'O | |
| TSC_iei_duration | OCT_1 | '72'O | |
| TSC_iei_error_flag_on | BIT_1 | '1'B | |
| TSC_iei_error_flag_off | BIT_1 | '0'B | |
| TSC_iei_facility | OCT_1 | '1C'O | |
| TSC_iei_feature_indicate | OCT_1 | '39'O | |
| TSC_iei_fixed_id | OCT_1 | '06'O | |
| TSC_iei_identity_type | OCT_1 | '02'O | |
| TSC_iei_info_type | OCT_1 | '01'O | |
| TSC_iei_iwu_attributes | OCT_1 | '12'O | |
| TSC_iei_iwu_to_iwu | OCT_1 | '77'O | |
| TSC_iei_iwu_packet | OCT_1 | '7A'O | |
| TSC_iei_location_area | OCT_1 | '07'O | |
| TSC_iei_multi_display | OCT_1 | '28'O | |
| TSC_iei_multi_keypad | OCT_1 | '2C'O | |
| TSC_iei_network_assigned_id | OCT_1 | '09'O | |
| TSC_iei_network_parameter | OCT_1 | '41'O | |
| TSC_iei_portable_id | OCT_1 | '05'O | |
| TSC_iei_progress_indicator | OCT_1 | '1E'O | |
| TSC_iei_rand | OCT_1 | '0C'O | |
| TSC_iei_reject_reason | OCT_1 | '60'O | |
| TSC_iei_release_reason | OCT_1 | 'E2'O | |
| TSC_iei_res | OCT_1 | '0D'O | |
| TSC_iei_setup_capability | OCT_1 | '62'O | |
| TSC_iei_single_display | OCT_1 | 'E8'O | |
| TSC_iei_signal | OCT_1 | 'E4'O | |
| TSC_iei_terminal_capability | OCT_1 | '63'O | |
| TSC_iei_test_hook_control | OCT_1 | 'E6'O | |
| TSC_iei_timer_restart | OCT_1 | 'E5'O | |
| TSC_iei_transit_delay | OCT_1 | '66'O | |
| TSC_iei_window_size | OCT_1 | '67'O | |
| TSC_mt_cc_alerting | MESSAGE_TYPE | '01'O | |

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| Test Suite Constant Declarations | | | |
|---------------------------------------|----------------|---------|--|
| Constant Name | Type | Value | Comments |
| TSC_mt_cc_call_proc | MESSAGE_TYPE | '02'O | |
| TSC_mt_cc_setup | MESSAGE_TYPE | '05'O | |
| TSC_mt_cc_connect | MESSAGE_TYPE | '07'O | |
| TSC_mt_cc_setup_ack | MESSAGE_TYPE | '0D'O | |
| TSC_mt_cc_connect_ack | MESSAGE_TYPE | '0F'O | |
| TSC_mt_cc_release | MESSAGE_TYPE | '4D'O | |
| TSC_mt_cc_release_com | MESSAGE_TYPE | '5A'O | |
| TSC_mt_cc_notify | MESSAGE_TYPE | '6E'O | |
| TSC_mt_cc_info | MESSAGE_TYPE | '7B'O | |
| TSC_mt_lce_page_respons e | MESSAGE_TYPE | '71'O | |
| TSC_mt_auth_request | MESSAGE_TYPE | '40'O | |
| TSC_mt_auth_reply | MESSAGE_TYPE | '41'O | |
| TSC_mt_cipher_request | MESSAGE_TYPE | '4C'O | |
| TSC_mt_mm_info_suggest | MESSAGE_TYPE | '52'O | |
| TSC_mt_locate_request | MESSAGE_TYPE | '54'O | |
| TSC_mt_locate_accept | MESSAGE_TYPE | '55'O | |
| TSC_mt_detach | MESSAGE_TYPE | '56'O | |
| TSC_mt_locate_reject | MESSAGE_TYPE | '57'O | |
| TSC_mt_identity_request | MESSAGE_TYPE | '58'O | |
| TSC_mt_identity_reply | MESSAGE_TYPE | '59'O | |
| TSC_mt_temporary_id_assig n | MESSAGE_TYPE | '5C'O | |
| TSC_mt_temporary_id_assig n_ack | MESSAGE_TYPE | '5D'O | |
| TSC_mt_temporary_id_assig n_reject | MESSAGE_TYPE | '5F'O | |
| TSC_pd_lce | BIT_4 | '0000'B | |
| TSC_pd_cc | BIT_4 | '0011'B | |
| TSC_pd_mm | BIT_4 | '0101'B | |
| TSC_em_class_a | ESTABLISH_MODE | 0 | Establish mode coding: |
| TSC_rm_normal | RELEASE_MODE | 0 | |
| TSC_rm_abnormal | RELEASE_MODE | 1 | |
| TSC_cs_disabled | CIPHER_STATUS | 0 | Cipher status coding: |
| TSC_cs_enabled | CIPHER_STATUS | 1 | |
| TSC_lce_hdr_cc | LCE_HEADER | '4'H | Lce_header coding: ETS 300 444, subclause 8.32 This LCE header is used when MAC U-plane services are required |

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| Test Case Variable Declarations | | | |
|---------------------------------|---------------------|---------|--|
| Variable Name | Type | Value | Comments |
| TCV_pdu_auth_reply | AUTH_REPLY | | Used to temporarily store a received AUTH_REPLY PDU |
| TCV_pdu_auth_request | AUTH_REQUEST | | Used to temporarily store a received AUTH_REQUEST PDU |
| TCV_pdu_cc_release | CC_RELEASE | | Used to temporarily store a received CC_RELEASE PDU |
| TCV_pdu_cc_release_com | CC_RELEASE_COM | | Used to temporarily store a received CC_RELEASE_COM PDU |
| TCV_pdu_cc_setup | CC_SETUP | | Used to temporarily store a received CC_SETUP PDU |
| TCV_pdu_identity_request | IDENTITY_REQUEST | | Used to temporarily store a received IDENTITY_REQUEST PDU |
| TCV_pdu_locate_acc | LOCATE_ACCEPT | | Used to temporarily store a received LOCATE_ACCEPT PDU |
| TCV_pdu_locate_rej | LOCATE_REJECT | | INFORMATION ELEMENT VARIABLES: Used to temporarily store a received LOCATE_REJECT PDU |
| TCV_pdu_locate_req | LOCATE_REQUEST | | INFORMATION ELEMENT VARIABLES: Used to temporarily store a received LOCATE_REQUEST PDU |
| TCV_pdu_temp_id_assign | TEMPORARY_ID_ASSIGN | | INFORMATION ELEMENT VARIABLES: Used to temporarily store a received TEMPORARY IDENTITY ASSIGN PDU |
| TCV_cc_iut_tf | BIT_1 | '0'B | Transaction flag for cc messages received from IUT |
| TCV_cc_lt_tf | BIT_1 | '1'B | Transaction flag for cc messages sent to IUT |
| TCV_cc_tv | BIT_3 | '000'B | Transaction value for CC |
| TCV_count | INT_8 | 0 | General counter |
| TCV_id_group | BIT_4 | '0000'B | Id_group used in Identity request procedure. |
| TCV_id_type | BIT_7 | '0000'B | Id_type used in Identity request procedure. |
| TCV_nw_ass_id_present | BOOLEAN | FALSE | Is <<Network assigned id>> ie present |

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| Test Case Variable Declarations | | | |
|---------------------------------|--------------------|-------------------|--|
| Variable Name | Type | Value | Comments |
| TCV_port_id_length_tpui | OCT_1 | '00'O | Length of the portable_id in case of TPUI, when received in a locate accept msg. |
| TCV_port_id_value_tpui | PORT_ID_VALUE_TYPE | | Value of the portable_id in case of TPUI, when received in a locate accept msg. |
| TCV_rand | BIT_64 | INT_TO_BIT(0, 64) | value of rand |
| TCV_reject_reason_code | OCT_1 | | Value of the reject reason, when received in a locate reject msg. |
| TCV_release_reason_present | BOOLEAN | FALSE | Is <<release_reason>> ie present |
| TCV_release_reason_code | OCT_1 | | Value of the release reason, when received in a release msg. |
| TCV_res_tx | BIT_32 | INT_TO_BIT(0, 32) | value of transmitted res |
| TCV_res_tx_1 | BIT_32 | INT_TO_BIT(0, 32) | value of transmitted res |
| TCV_result | BOOLEAN | FALSE | General BOOLEAN variable |
| TCV_rs | BIT_64 | INT_TO_BIT(0, 64) | value of rs |
| Detailed Comments : | | | |

| PCO Declarations | | | |
|---|-----------------|-------------|-----------------|
| PCO Name | PCO Type | Role | Comments |
| DLB | B_SAP | LT | 1) |
| DLS | S_SAP | LT | 2) |
| Detailed Comments : 1) SAP for Broadcast services 2) SAP for connection oriented services | | | |

| Timer Declarations | | | |
|---------------------|---------------------|------|--|
| Timer Name | Duration | Unit | Comments |
| T_P_CC_01 | $20 * (1 + 5/100)$ | s | PROTOCOL TIMERS RUNNING IN THE PT (LT): |
| T_P_CC_02 | $36 * (1 + 5/100)$ | s | Overlap sending timer. CC release timer (changed to 36 seconds in version 2 of ETS 300 175-5 [5]) |
| T_P_CC_03 | $20 * (1 + 5/100)$ | s | CC setup timer. |
| T_P_CC_04 | $100 * (1 + 5/100)$ | s | CC completion timer |
| T_P_CC_05 | $10 * (1 + 5/100)$ | s | CC connect timer |
| T_P_MM_auth_1 | $10 * (1 + 5/100)$ | s | FT initiated PT authentication timer |
| T_P_MM_cipher_2 | $10 * (1 + 5/100)$ | s | PT cipher-switching timer |
| T_P_MM_locate_1 | $20 * (1 + 5/100)$ | s | Location timer |
| T_P_LCE_01 | $5 * (1 + 5/100)$ | s | Link release timer |
| T_F_CC_01_max | $20 * (1 + 10/100)$ | s | For testing CC release timer. 5% bigger than T_P_CC_01. |
| T_F_CC_01_min | 20 | s | For testing CC release timer. 5% smaller than T_P_CC_01. |
| T_F_CC_01_half | $20 * (1 - 50/100)$ | s | 50 % of T_F_CC_01. For testing restart of T_F_CC_01. |
| T_F_CC_02_max | $36 * (1 + 10/100)$ | s | For testing CC release timer. 5% bigger than T_P_CC_02. |
| T_F_CC_02_min | 36 | s | For testing CC release timer. 5% smaller than T_P_CC_02. |
| T_F_CC_03_max | $20 * (1 + 10/100)$ | s | For testing CC setup timer. 5% bigger than T_P_CC_03. |
| T_F_CC_03_min | 20 | s | For testing CC setup timer. 5% smaller than T_P_CC_03. |
| T_F_LCE_03_max | $3 * (1 + 10/100)$ | s | For testing link maintain timer in the FT. 5% bigger than T_P_LCE_03 |
| T_F_LCE_03_min | 3 | s | For testing link maintain timer in the FT. 5% smaller than T_P_LCE_03 |
| T_F_MM_auth_1_max | $10 * (1 + 10/100)$ | s | For testing auth 1 timer. 5% bigger than T_P_MM_auth_1 |
| T_F_MM_cipher_1_max | $10 * (1 + 5/100)$ | s | For testing cipher timer. 5% bigger than T_P_MM_cipher_1 |
| T_F_MM_ident_1_max | $10 * (1 + 10/100)$ | s | For testing ident 1 timer. 5% bigger than T_P_MM_ident_1 |

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| Timer Declarations | | | |
|---|-------------------|------|---|
| Timer Name | Duration | Unit | Comments |
| T_F_MM_ident_2_max | 10 * (1 + 10/100) | s | For testing ident 2 timer. 5% bigger than T_P_MM_ident_1 |
| T_CIPHER_SWITCH | 20 | s | Ciphering switching time. It is to start with sending of DL_ENCRYPT_REQ and to stop with receiving of DL_ENCRYPT_IND. |
| T_DLC_RESPONSE | 4 | s | Guards the time between a direct link establish request, and the confirm from the DLC layer, or between a link release request and the confirm from the DLC |
| T_USER_INVOKE | 30 | s | Guards the user invocation time of an operation requested by an implicit send statement. |
| T_RELEASE_DELAY | 4 | s | Before terminating the testcase with a normal release or a release_link, this timer is started, in order to catch any strange behaviour of the IUT |
| T_GSM_WAIT | 12 | s | Before terminating the testcase with a normal release or a release_link, this timer is started, in order to catch any strange behaviour of the IUT(MSC) |
| <p>Detailed Comments : All protocol timers are defined 5 % higher than their standard value, in order to deal with delays caused by the testequipment.</p> | | | |

| ASP Type Definition | | |
|---|----------------------|--|
| ASP Name : DL_BROADCAST_IND | | |
| PCO Type : B_SAP | | |
| Comments : ETS 300 175-4 [5], 8.3.3.1 | | |
| Parameter Name | Parameter Type | Comments |
| cluster_address_list | CLUSTER_ADDRESS_LIST | |
| message_unit | PDU | |
| extended_message_flag | BIT_1 | '1'B means extended frame format shall be used, see ETS 300 175-4 [4], subclause 6.2.2 |
| error_flag | BIT_1 | '1'B means CRC error occurred in MAC-PAGE-ind primitive |
| Detailed Comments : This primitive is not used in PT testing. The message unit length information element is not used in this primitive | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_DATA_IND | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [5], subclause 8.3.2.3 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| message_unit | PDU | |
| Detailed Comments : The message unit length information element is not used in this primitive | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_DATA_REQ | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [5], subclause 8.3.2.3 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| message_unit | PDU | |
| Detailed Comments : The message unit length information element is not used in this primitive | | |

| ASP Type Definition | | |
|---|-------------------------------|----------|
| ASP Name : DL_ENCRYPT_IND PCO Type : S_SAP Comments : ETS 300 175-4 [5], subclause 8.3.2.8 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| connection_identities | CONNECTION_IDENTITIES | |
| encryption_status | CIPHER_STATUS | |
| Detailed Comments : | | |

| ASP Type Definition | | |
|---|-------------------------------|----------|
| ASP Name : DL_ENCRYPT_REQ PCO Type : S_SAP Comments : ETS 300 175-4 [5], subclause 8.3.2.8 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| connection_identities | CONNECTION_IDENTITIES | |
| encryption_command | CIPHER_STATUS | |
| Detailed Comments : | | |

| ASP Type Definition | | |
|---|-------------------------------|----------|
| ASP Name : DL_ENC_KEY_REQ PCO Type : S_SAP Comments : ETS 300 175-4 [5], subclause 8.3.2.7 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| connection_identities | CONNECTION_IDENTITIES | |
| encryption_key | ENCRYPTION_KEY | |
| Detailed Comments : | | |

| ASP Type Definition | | |
|---|-------------------------------|----------|
| ASP Name : DL_ESTABLISH_CFM PCO Type : S_SAP Comments : ETS 300 175-4 [5], subclause 8.3.2.1 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| Detailed Comments : This primitive is not used in PT testing, because only the indirect link establishment method is used. | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_ESTABLISH_REQ | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [4], subclause 8.3.2.1 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| establish_mode | ESTABLISH_MODE | |
| radio_fixed_part_number | RADIO_FIXED_PART_NUMBER | |
| message_unit | PDU | |
| Detailed Comments : For now this primitive is not used in PT testing, because only the indirect link establishment method is used. The message unit length information element is not used in this primitive | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_RELEASE_CFM | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [5], 8.3.2.2 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| release_mode | RELEASE_MODE | |
| Detailed Comments : | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_RELEASE_IND | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [5], subclause 8.3.2.2 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| release_mode | RELEASE_MODE | |
| Detailed Comments : | | |

| ASP Type Definition | | |
|--|-------------------------------|----------|
| ASP Name : DL_RELEASE_REQ | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-4 [5], subclause 8.3.2.2 | | |
| Parameter Name | Parameter Type | Comments |
| data_link_endpoint_identifier | DATA_LINK_ENDPOINT_IDENTIFIER | |
| release_mode | RELEASE_MODE | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : AUTH_REPLY PCO Type : S_SAP Comments : ETS 300 175-5 [5], subclause 6.3.6.8 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| res | RES | |
| rs | RS | |
| zap_field | ZAP_FIELD | |
| service_class | SERVICE_CLASS | |
| key | KEY | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : AUTH_REQUEST PCO Type : S_SAP Comments : ETS 300 175-5 [5], subclause 6.3.6.9 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| auth_type | AUTH_TYPE | |
| rand | RAND | |
| res | RES | |
| rs | RS | |
| cipher_info | CIPHER_INFO | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|---------------------|----------|
| PDU Name : CC_ALERTING | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.2.5 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| call_attributes | CALL_ATTRIBUTES | |
| connection_id | CONNECTION_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| signal | SIGNAL | |
| feature_indicate | FEATURE_INDICATE | |
| terminal_capability | TERMINAL_CAPABILITY | |
| transit_delay | TRANSIT_DELAY | |
| window_size | WINDOW_SIZE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|--------------------|----------|
| PDU Name : CC_CALL_PROC | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.2.4 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| call_attributes | CALL_ATTRIBUTES | |
| connection_id | CONNECTION_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| signal | SIGNAL | |
| feature_indicate | FEATURE_INDICATE | |
| transit_delay | TRANSIT_DELAY | |
| window_size | WINDOW_SIZE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : CC_CONNECT PCO Type : S_SAP Comments : ETS 300 175-5 [5], subclause 6.3.2.6 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| call_attributes | CALL_ATTRIBUTES | |
| connection_id | CONNECTION_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| signal | SIGNAL | |
| feature_indicate | FEATURE_INDICATE | |
| terminal_capability | TERMINAL_CAPABILITY | |
| transit_delay | TRANSIT_DELAY | |
| window_size | WINDOW_SIZE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|------------------|----------|
| PDU Name : CC_CONNECT_ACK PCO Type : S_SAP Comments : ETS 300 175-5 [5], subclause 6.3.2.7 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| feature_indicate | FEATURE_INDICATE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|-------------------------|----------|
| PDU Name : CC_INFO | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.2.2 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| location_area | LOCATION_AREA | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| multi_keypad | MULTI_KEYPAD | |
| single_keypad | SINGLE_KEYPAD | |
| signal | SIGNAL | |
| feature_activate | FEATURE_ACTIVATE | |
| feature_indicate | FEATURE_INDICATE | |
| network_parameter | NETWORK_PARAMETER | |
| called_party_number | CALLED_PARTY_NUMBER | |
| called_party_subaddress | CALLED_PARTY_SUBADDRESS | |
| sending_complete | SENDING_COMPLETE | |
| test_hook_control | TEST_HOOK_CONTROL | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : CC_NOTIFY | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.2.13 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| timer_restart | TIMER_RESTART | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|--------------------|----------|
| PDU Name : CC_RELEASE PCO Type : S_SAP Comments : ETS 300 175-5 [5],subclause 6.3.2.8 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| release_reason | RELEASE_REASON | |
| facility | FACILITY | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| feature_indicate | FEATURE_INDICATE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| progress_indicator | PROGRESS_INDICATOR | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|-------------------|----------|
| PDU Name : CC_RELEASE_COM PCO Type : S_SAP Comments : ETS 300 175-5 [5],subclause 6.3.2.9 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| release_reason | RELEASE_REASON | |
| identity_type | IDENTITY_TYPE | |
| location_area | LOCATION_AREA | |
| iwu_attributes | IWU_ATTRIBUTES | |
| facility | FACILITY | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| feature_indicate | FEATURE_INDICATE | |
| network_parameter | NETWORK_PARAMETER | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| |
|----------------------------|
| PDU Type Definition |
|----------------------------|

PDU Name : CC_SETUP

PCO Type : S_SAP

Comments : ETS 300 175-5 [5], subclause 6.3.2.1

| Field Name | Field Type | Comments |
|--------------------------|--------------------------|----------|
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| fixed_id | FIXED_ID | |
| basic_service | BASIC_SERVICE | |
| iwu_attributes | IWU_ATTRIBUTES | |
| repeat_indicator_1 | REPEAT_INDICATOR | |
| call_attributes | CALL_ATTRIBUTES | |
| repeat_indicator_2 | REPEAT_INDICATOR | |
| connection_attributes | CONNECTION_ATTRIBUTES | |
| cipher_info | CIPHER_INFO | |
| connection_id | CONNECTION_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| multi_keypad | MULTI_KEYPAD | |
| single_keypad | SINGLE_KEYPAD | |
| signal | SIGNAL | |
| feature_activate | FEATURE_ACTIVATE | |
| feature_indicate | FEATURE_INDICATE | |
| network_parameter | NETWORK_PARAMETER | |
| terminal_capability | TERMINAL_CAPABILITY | |
| end_to_end_compatibility | END_TO_END_COMPATIBILITY | |
| rate_parameters | RATE_PARAMETERS | |
| transit_delay | TRANSIT_DELAY | |
| window_size | WINDOW_SIZE | |
| calling_party_number | CALLING_PARTY_NUMBER | |
| called_party_number | CALLED_PARTY_NUMBER | |
| called_party_subaddress | CALLED_PARTY_SUBADDRESS | |
| sending_complete | SENDING_COMPLETE | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |

Detailed Comments :

| PDU Type Definition | | |
|--|--------------------|----------|
| PDU Name : CC_SETUP_ACK | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.2.3 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| info_type | INFO_TYPE | |
| portable_id | PORTABLE_ID | |
| fixed_id | FIXED_ID | |
| location_area | LOCATION_AREA | |
| call_attributes | CALL_ATTRIBUTES | |
| connection_id | CONNECTION_ID | |
| facility | FACILITY | |
| progress_indicator | PROGRESS_INDICATOR | |
| multi_display | MULTI_DISPLAY | |
| single_display | SINGLE_DISPLAY | |
| signal | SIGNAL | |
| feature_indicate | FEATURE_INDICATE | |
| transit_delay | TRANSIT_DELAY | |
| window_size | WINDOW_SIZE | |
| delimiter_request | DELIMITER_REQUEST | |
| iwu_to_iwu | IWU_TO_IWU | |
| iwu_packet | IWU_PACKET | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : CIPHER_REQUEST | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.11 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| cipher_info | CIPHER_INFO | |
| call_identity | CALL_ID | |
| connection_identity | CONNECTION_ID | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : DETACH | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.13 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : IDENTITY_REPLY | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.14 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| repeat_indicator_1 | REPEAT_INDICATOR | |
| portable_id | PORTABLE_ID | |
| repeat_indicator_2 | REPEAT_INDICATOR | |
| fixed_id | FIXED_ID | |
| repeat_indicator_3 | REPEAT_INDICATOR | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|------------------|----------|
| PDU Name : IDENTITY_REQUEST | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.15 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| repeat_indicator | REPEAT_INDICATOR | |
| identity_type | IDENTITY_TYPE | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : LOCATE_ACCEPT | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.17 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| location_area | LOCATION_AREA | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| duration | DURATION | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : LOCATE_REJECT | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.18 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| reject_reason | REJECT_REASON | |
| duration | DURATION | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : LOCATE_REQUEST | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.19 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| fixed_id | FIXED_ID | |
| location_area | LOCATION_AREA | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| cipher_info | CIPHER_INFO | |
| setup_capability | SETUP_CAPABILITY | |
| terminal_capability | TERMINAL_CAPABILITY | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : MM_INFO_SUGGEST | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.23 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| info_type | INFO_TYPE | |
| fixed_id | FIXED_ID | |
| location_area | LOCATION_AREA | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| network_parameter | NETWORK_PARAMETER | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|---------------------|----------|
| PDU Name : TEMPORARY_ID_ASSIGN | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.24 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| duration | DURATION | |
| iwu_to_iwu | IWU_TO_IWU | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : TEMPORARY_ID_ASSIGN_ACK | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.25 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|---|----------------|----------|
| PDU Name : TEMPORARY_ID_ASSIGN_REJECT | | |
| PCO Type : S_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.6.26 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| reject_reason | REJECT_REASON | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|---------------------|----------|
| PDU Name : LCE_PAGE_RESPONSE | | |
| PCO Type : B_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.3.7.1 | | |
| Field Name | Field Type | Comments |
| network_header | NETWORK_HEADER | |
| message_type | MESSAGE_TYPE | |
| portable_id | PORTABLE_ID | |
| fixed_id | FIXED_ID | |
| network_assigned_id | NETWORK_ASSIGNED_ID | |
| cipher_info | CIPHER_INFO | |
| Detailed Comments : | | |

| PDU Type Definition | | |
|--|----------------------|----------|
| PDU Name : LCE_REQUEST_PAGE | | |
| PCO Type : B_SAP | | |
| Comments : ETS 300 175-5 [5], subclause 6.4.2 | | |
| Field Name | Field Type | Comments |
| lce_header | LCE_HEADER | |
| short_format_address | SHORT_FORMAT_ADDRESS | |
| Detailed Comments : Long format messages not supported in ETS 300 444 | | |

III

Constraints Part

| Structured Type Constraint Declaration | | |
|---|---|-------------|
| Constraint Name : Auth_type_rx_base | | |
| Structured Type : AUTH_TYPE | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the AUTH_TYPE ie. GSM is mandated. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_auth_type | |
| length | '03'O | |
| auth_algo_id | '40'O | GSM |
| prop_algo_id | OMIT | |
| auth_key_number | '0000'B | active IPUI |
| auth_key_type | '0001'B | UAK |
| cipher_key_number | ('0000'B, '0001'B, '0010'B, '0011'B, '0100'B, '0101'B, '0110'B) | |
| upc | ? | |
| txc | '0'B | |
| f5 | '0'B | |
| inc | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|------------------|
| Constraint Name : Auth_type_rx_dck_no_zap | | |
| Structured Type : AUTH_TYPE | | |
| Derivation Path : Auth_type_rx_base. | | |
| Comments : This constraint implies DCK storage and no ZAP increment. GSM is used, and authentication is based on UAK. | | |
| Element Name | Element Value | Comments |
| auth_key_type | '0001'B | UAK |
| upc | '1'B | DCK stored |
| inc | '0'B | No ZAP increment |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|---------------------------------------|
| Constraint Name : Basic_service_rx_base | | |
| Structured Type : BASIC_SERVICE | | |
| Derivation Path : | | |
| Comments : ETS 300 444, subclause 8.2, subclause 8.18. Basic speech default setup attributes are used | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_basic_service | |
| basic_service | '0000'B | basic speech default setup attributes |
| call_class | ('000'B, '001'B) | normal or internal call setup |
| f2 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|--------------------------|
| Constraint Name : Basic_service_tx_default | | |
| Structured Type : BASIC_SERVICE | | |
| Derivation Path : | | |
| Comments : ETS 300 444, subclause 8.2, subclause 8.18 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_basic_service | |
| basic_service | '0000'B | default setup attributes |
| call_class | '000'B | normal call setup |
| f2 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-----------------------|--------------------------|
| Constraint Name : Basic_service_tx_emergency | | |
| Structured Type : BASIC_SERVICE | | |
| Derivation Path : | | |
| Comments : ETS 300 444[5], subclause 7.6.4 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_basic_service | |
| basic_service | '0000'B | default setup attributes |
| call_class | '010'B | emergency call setup |
| f2 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|----------------------|
| Constraint Name : Basic_service_tx_gsm | | |
| Structured Type : BASIC_SERVICE | | |
| Derivation Path : | | |
| Comments : ETS 300 444, subclause 8.2, subclause 8.18 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_basic_service | |
| basic_service | '0100'B | GSM setup attributes |
| call_class | '000'B | normal call setup |
| f2 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-------------------------|----------------------|
| Constraint Name : Call_attributes_rx_base | | |
| Structured Type : CALL_ATTRIBUTES | | |
| Derivation Path : | | |
| Comments : ETS 300 444, subclause 7.7.5 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_call_attributes | |
| length | ? | |
| network_layer_attributes | ? | |
| coding_standard | '00'B | DECT standard coding |
| f3 | '1'B | |
| c_plane_routing | ? | |
| c_plane_class | ? | |
| f4 | '1'B | |
| lu_id | ? | |
| u_plane_symmetry | ? | |
| ext5 | ? | |
| lu_id_f_p | ? | |
| f5a | '100'B | '100' |
| u_plane_frame_type | ? | |
| u_plane_class | ? | |
| ext6 | ? | |
| u_plane_frame_type_f_p | ? | |
| u_plane_class_f_p | ? | |
| f6a | '1'B | '1' |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : Call_id_rx_base | | |
| Structured Type : CALL_ID | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the CALL_ID ie. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_call_id | |
| length | ('01'O, '02'O) | |
| pd | ? | |
| tv | ? | |
| ext3a | ? | |
| extended_transaction_value | ? IF_PRESENT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------------|----------|
| Constraint Name : Called_party_number_rx_base | | |
| Structured Type : CALLED_PARTY_NUMBER | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_called_party_number | |
| length | COMPLEMENT('00'O) | |
| numbering_plan_id | '0000'B | Unknown |
| number_type | '000'B | Unknown |
| f3 | '1'B | |
| called_party_address | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------------------------|----------|
| Constraint Name : Called_party_subaddress_rx_base | | |
| Structured Type : CALLED_PARTY_SUBADDRESS | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_called_party_subaddress | |
| length | COMPLEMENT('00'O) | |
| spare | '000'B | |
| o_e | ? | |
| subaddress_type | '0?0'B | |
| f3 | '1'B | |
| subaddress_info | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|------------------------------|----------|
| Constraint Name : Calling_party_number_rx_base | | |
| Structured Type : CALLING_PARTY_NUMBER | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the CALLING_PARTY_NUMBER ie. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_calling_party_number | |
| length | COMPLEMENT('00'O) | |
| numbering_plan_id | ('?00?'B, '0011'B) | |
| number_type | COMPLEMENT('1?1'B) | |
| ext3 | ? | |
| screening_indicator | ? IF_PRESENT | |
| spare | '000'B | |
| presentation_indicator | COMPLEMENT('11'B) IF_PRESENT | |
| f3a | '1'B IF_PRESENT | |
| calling_party_address | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|-----------------|
| Constraint Name : Called_party_number_tx_pixit | | |
| Structured Type : CALLED_PARTY_NUMBER | | |
| Derivation Path : | | |
| Comments : A send constraint for the called party number, specifying the actual number, as it is specified in the PIXIT. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_called_party_number | |
| length | TSO_int_to_oct_1(TSPX_nr_of_digits_ in_cpn) | |
| numbering_plan_id | '0000'B | Unknown |
| number_type | '000'B | Unknown |
| f3 | '1'B | |
| called_party_address | TSPX_called_party_number | PIXIT parameter |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|--------------------------|---|
| Constraint Name : Cipher_info_rx_base | | |
| Structured Type : CIPHER_INFO | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_cipher_info | |
| length | ('02'O, '03'O) | |
| cipher_algo_id | ('0000001'B, '1111111'B) | DECT standard cipher algorithm OR Escape to proprietary algorithm id |
| y_n | ? | |
| prop_algo_id | ? IF_PRESENT | |
| cipher_key_number | ? | |
| cipher_key_type | ('1001'B, '1010'B) | 'Derived' or 'Static' |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------------|--------------------------------|
| Constraint Name : Cipher_info_gsm | | |
| Structured Type : CIPHER_INFO | | |
| Derivation Path : Cipher_info_rx_base. | | |
| Comments : A receive/send constraint for the cipher info ie, specifying DECT standard cipher algorithm, ciphering disable, cipher key type DCK. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_cipher_info | |
| length | '02'O | |
| cipher_algo_id | '0000001'B | DECT standard cipher algorithm |
| y_n | '0'B | disable ciphering |
| prop_algo_id | OMIT | |
| cipher_key_number | TSV_cc_ckn_gsm | |
| cipher_key_type | '1001'B | DCK |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------------|--------------------------------|
| Constraint Name : Cipher_info_gsm_send | | |
| Structured Type : CIPHER_INFO | | |
| Derivation Path : Cipher_info_rx_base. | | |
| Comments : A receive/send constraint for the cipher info ie, specifying DECT standard cipher algorithm, ciphering enable, cipher key type DCK. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_cipher_info | |
| length | '02'O | |
| cipher_algo_id | '0000001'B | DECT standard cipher algorithm |
| y_n | '1'B | enable ciphering |
| prop_algo_id | OMIT | |
| cipher_key_number | TSV_cc_ckn_gsm | |
| cipher_key_type | '1001'B | DCK |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------------|--------------------------------|
| Constraint Name : Cipher_info_gsm_send_disable | | |
| Structured Type : CIPHER_INFO | | |
| Derivation Path : Cipher_info_rx_base. | | |
| Comments : A receive/send constraint for the cipher info ie, specifying DECT standard cipher algorithm, ciphering disable, cipher key type DCK. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_cipher_info | |
| length | '02'O | |
| cipher_algo_id | '0000001'B | DECT standard cipher algorithm |
| y_n | '0'B | disable ciphering |
| prop_algo_id | OMIT | |
| cipher_key_number | TSV_cc_ckn_gsm | |
| cipher_key_type | '1001'B | DCK |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|----------|
| Constraint Name : Connection_id_rx_base | | |
| Structured Type : CONNECTION_ID | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_connection_id | |
| length | COMPLEMENT('00'O) | |
| u_and_c_id | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------|
| Constraint Name : Delimiter_request_rx_base | | |
| Structured Type : DELIMITER_REQUEST | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the DELIMITER_REQUEST ie. | | |
| Element Name | Element Value | Comments |
| delimiter_request | 'A2'O | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|------------------|----------|
| Constraint Name : Duration_rx_base | | |
| Structured Type : DURATION | | |
| Derivation Path : | | |
| Comments : ETS 300 444, subclause 7.7.13 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_duration | |
| length | ? | |
| time_limits | ? | |
| lock_limits | ? | |
| ext3 | ? | |
| time_duration | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|--|
| Constraint Name : Facility_rx_base | | |
| Structured Type : FACILITY | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei length service_discriminator f3 component | TSC_iei_facility COMPLEMENT('00'O) '10001'B '100'B ? | Discriminator for supplementary service applications |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---|------------|
| Constraint Name : Feature_indicate_rx_base | | |
| Structured Type : FEATURE_INDICATE | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.17 | | |
| Element Name | Element Value | Comments |
| iei length feature ext3 parameter status_indicator component | TSC_iei_feature_indicate ? ? '1'B ? ? ? | DECT_1_253 |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Fixed_id_rx_base | | |
| Structured Type : FIXED_ID | | |
| Derivation Path : | | |
| Comments : The basic constraint for the Fixed_id_iei | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_fixed_id | |
| length | ('00'O, '03'O, '04'O, '05'O, '06'O, '07'O, '08'O, '09'O, '0A'O, '0B'O) | |
| type | ? | |
| f3 | '1'B | |
| length_of_id_value | ? | |
| f4 | '1'B | |
| id_value | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-------------------------------|----------|
| Constraint Name : Fixed_id_ari | | |
| Structured Type : FIXED_ID | | |
| Derivation Path : | | |
| Comments : A constraint for the fixed_id with an ARI + RPN. The actual value of the ARI+RPN is given as a PIXIT parameter. This constraint can be used for rx and tx. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_fixed_id | |
| length | TSC_fixed_id_length_ari | |
| type | '0000000'B | ARI |
| f3 | '1'B | |
| length_of_id_value | INT_TO_BIT(TSC_ari_length, 7) | |
| f4 | '1'B | |
| id_value | TSPX_ari_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------------|----------|
| Constraint Name : Fixed_id_ari_rpn | | |
| Structured Type : FIXED_ID | | |
| Derivation Path : | | |
| Comments : A constraint for the fixed_id with an ARI D+RPN. The actual value of the ARI D+RPN is given as a PIXIT parameter. This constraint can be used for rx and tx. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_fixed_id | ARI +RPN |
| length | TSC_fixed_id_length_ari_rpn | |
| type | '0000001'B | |
| f3 | '1'B | |
| length_of_id_value | '0100111'B | |
| f4 | '1'B | |
| id_value | TSPX_ari_rpn_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|------------------|----------|
| Constraint Name : Fixed_id_gsm | | |
| Structured Type : FIXED_ID | | |
| Derivation Path : | | |
| Comments : A constraint for the fixed_id sent with CC_SETUP to a MSC (GSM) | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_fixed_id | |
| length | '00'O | |
| type | ? | |
| f3 | ? | |
| length_of_id_value | ? | |
| f4 | ? | |
| id_value | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--------------------------------|----------|
| Constraint Name : Fixed_id_park | | |
| Structured Type : FIXED_ID | | |
| Derivation Path : | | |
| Comments : A constraint for the fixed_id with a PARK. The actual value of the PARK is given as a PIXIT parameter. This constraint can be used for rx and tx. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_fixed_id | PARK |
| length | TSC_fixed_id_length_park | |
| type | '0100000'B | |
| f3 | '1'B | |
| length_of_id_value | INT_TO_BIT(TSC_park_length, 7) | |
| f4 | '1'B | |
| id_value | TSPX_park_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|----------|
| Constraint Name : Identity_type_rx_base | | |
| Structured Type : IDENTITY_TYPE | | |
| Derivation Path : | | |
| Comments : ETSI 300 175-5 [5], subclause 7.7.19 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_identity_type | |
| length | '02'O | |
| id_group | ? | |
| space | '000'B | |
| f3 | '1'B | |
| type | ? | |
| f4 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|-------------|
| Constraint Name : Identity_type_ipui | | |
| Structured Type : IDENTITY_TYPE | | |
| Derivation Path : Identity_type_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_TYPE ie, specifying the portable id with the IPUI | | |
| Element Name | Element Value | Comments |
| id_group | '0000'B | portable id |
| type | '0000000'B | IPUI |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|-------------|
| Constraint Name : Identity_type_ipei | | |
| Structured Type : IDENTITY_TYPE | | |
| Derivation Path : Identity_type_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_TYPE ie, specifying the portable id with the IPEI | | |
| Element Name | Element Value | Comments |
| id_group | '0000'B | portable id |
| type | '0010000'B | IPEI |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|---------------------|
| Constraint Name : Identity_type_tmsi | | |
| Structured Type : IDENTITY_TYPE | | |
| Derivation Path : Identity_type_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_TYPE ie, specifying the network assigned id with the GSM TMSI | | |
| Element Name | Element Value | Comments |
| id_group | '0001'B | network assigned id |
| type | '1110100'B | GSM TMSI |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-------------------|----------|
| Constraint Name : Info_type_rx_base | | |
| Structured Type : INFO_TYPE | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the INFO_TYPE PDU. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_info_type | |
| length | '01'O | |
| info_parameter | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-------------------|----------|
| Constraint Name : Info_type_rx_locate_suggest | | |
| Structured Type : INFO_TYPE | | |
| Derivation Path : | | |
| Comments : A receive constraint for the info type ie, specifying info-parameter 'locate_suggest' | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_info_type | |
| length | '01'O | |
| info_parameter | '00'O | 1) |
| Detailed Comments : 1) specifies 'locate suggest', and 'ext' as 0 | | |

| Structured Type Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Iwu_packet_rx_base | | |
| Structured Type : IWU_PACKET | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_iwu_packet | |
| length | COMPLEMENT('00'O) | |
| I2_protocol_id | ('0000?'B, '00?10'B, '00111'B, '01?00'B, '10001'B, '10?10'B) | |
| f3 | '0'B | |
| s_r | ? | |
| ext3 | ? | |
| I3_protocol_id | ('000?0'B , '0011?'B, '0100?'B, '01010'B , '10010'B) IF_PRESENT | |
| f3a | '111'B IF_PRESENT | |
| info | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Iwu_attributes_rx_base | | |
| Structured Type : IWU_ATTRIBUTES | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_iwu_attributes | |
| length | COMPLEMENT('00'O) | |
| info_transfer_capability | ('00000'B, '01000'B, '01001'B, '10000'B, '10001'B, '10100'B, '11000'B) | |
| coding_standard | '00'B | |
| f3 | '1'B | |
| external_connection_type | ('0000'B, '0001'B, '0010'B, '0011'B, '0100'B, '1000'B) | |
| negotiation_indicator | ('000'B, '100'B) | |
| f4 | '1'B | |
| info_transfer_rate | ('00000'B, '0101?'B, '1000?'B, '10011'B , '1111?'B) IF_PRESENT | |
| trans_mode | COMPLEMENT('01'B) | |
| ext5 | ? IF_PRESENT | |
| rate_multiplier | '0????'B IF_PRESENT | |
| unit_rate | COMPLEMENT('00'B) IF_PRESENT | |
| ext5a | ? IF_PRESENT | |
| establishment | '00'B IF_PRESENT | |
| configuration | '00'B IF_PRESENT | |
| structure | ('00?'B, '100'B, '111'B) IF_PRESENT | |
| ext5b | ? IF_PRESENT | |
| info_transfer_rate_d_o | ('00000'B, '0101?'B, '1000?'B, '10011'B , '1111?'B) IF_PRESENT | |
| symmetry | COMPLEMENT('01'B) IF_PRESENT | |
| ext5c | ? IF_PRESENT | |
| rate_multiplier_d_o | '0????'B IF_PRESENT | |
| unit_rate_d_o | COMPLEMENT('00'B) IF_PRESENT | |
| f5d | '1'B IF_PRESENT | |

Continued on next page

Continued from previous page

| Structured Type Constraint Declaration | | |
|--|--|----------|
| Element Name | Element Value | Comments |
| user_protocol_id | ('00???'B , '0100?'B, '1000?'B, '11000'B) IF_PRESENT | |
| f6 | '00'B IF_PRESENT | |
| ext6 | ? IF_PRESENT | |
| I3_protocol_id | ('000?0'B , '0011?'B , '0100?'B , '01010'B , '10010'B) IF_PRESENT | |
| f7 | '11'B IF_PRESENT | |
| ext7 | ? IF_PRESENT | |
| I2_protocol_id | ('0000?'B, '00?10'B, '00111'B, '01?00'B, '10001'B, '10?10'B) IF_PRESENT | |
| f8 | '11'B IF_PRESENT | |
| ext8 | ? IF_PRESENT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|---|
| Constraint Name : Iwu_to_iwu_rx_base | | |
| Structured Type : IWU_TO_IWU | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], second edition, subclause 7.7.23 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_iwu_to_iwu | |
| length | COMPLEMENT('00'O) | |
| protocol_discriminator | ('00000'B, '000010'B, '000100'B, '000101'B, '000111'B, '00100'B, '01000'B, '111111'B) | CCITT Q.931 (I.451), partial message |
| s_r | ? | |
| f3 | '1'B | |
| discriminator_type | ('0000000'B, '0000001'B) | unspecified EMC |
| f4 | '1'B | '1' |
| discriminator | * | If discriminator_type = 0, discriminator is absent |
| contents | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|----------------------------------|----------------------------------|
| Constraint Name : Location_area_rx_base | | |
| Structured Type : LOCATION_AREA | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_location_area | |
| length | ('01'O, '02'O, '08'O, '09'O) | |
| location_area_level | TSPX_location_area_level | LAL to be specified in PIXIT. |
| li_type | ('01'B, '10'B, '11'B) | |
| spare | '111'B | if GSM loc. info is not included |
| eli_type | ('0111'B, '1111'B) IF_PRESENT | |
| extended_location_information | ? IF_PRESENT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------------------|--|
| Constraint Name : Location_area_tx_lal_and_eli | | |
| Structured Type : LOCATION_AREA | | |
| Derivation Path : | | |
| Comments : ETS 300 370 [12], subclause 6.3.2.3 Table 114 and subclause 6.1.8.2.12 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_location_area | |
| length | '09'O | |
| location_area_level | TSPX_location_area_level | LAL to be specified in PIXIT. |
| li_type | '11'B | LAL and ELI included |
| spare | OMIT | |
| eli_type | '1111'B | |
| extended_location_information | TSV_extended_location_information | Initial value or assigned with LOCATE_ACCEPT |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|--|
| Constraint Name : Location_area_tx_lal_and_eli_unknown_lac | | |
| Structured Type : LOCATION_AREA | | |
| Derivation Path : | | |
| Comments : ETSI 300 370 [12], subclause 6.3.2.3 Table 114 and subclause 6.1.8.2.12 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_location_area | |
| length | '09'O | |
| location_area_level | TSPX_location_area_level | LAL to be specified in PIXIT. |
| li_type | '11'B | LAL and ELI included |
| spare | OMIT | |
| eli_type | '1111'B | |
| extended_location_information | TSPX_extended_location_information_unknown_lac | ELI with an unknown value for LAC specified in PIXIT |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|---|
| Constraint Name : Location_area_tx_lal_and_eli_unknown_plmn | | |
| Structured Type : LOCATION_AREA | | |
| Derivation Path : | | |
| Comments : ETSI 300 370 [12], subclause 6.3.2.3 Table 114 and subclause 6.1.8.2.12 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_location_area | |
| length | '09'O | |
| location_area_level | TSPX_location_area_level | LAL to be specified in PIXIT. |
| li_type | '11'B | LAL and ELI included |
| spare | OMIT | |
| eli_type | '1111'B | |
| extended_location_information | TSPX_extended_location_information _unknown_plmn | ELI with an unknown value for PLMN(i.e. wrong MNC) specified in PIXIT |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-----------------------|--------------------------|
| Constraint Name : Location_area_rx_lal_and_eli | | |
| Structured Type : LOCATION_AREA | | |
| Derivation Path : | | |
| Comments : ETSI 300 370 [12], subclause 6.1.7.1.4 and subclause 6.1.8.1.11 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_location_area | |
| length | '05'O | |
| location_area_level | ? | |
| li_type | '11'B | LAL and ELI included |
| spare | OMIT | |
| eli_type | '1111'B | GSM location information |
| extended_location_information | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Multi_display_rx_base | | |
| Structured Type : MULTI_DISPLAY | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.26 | | |
| Element Name | Element Value | Comments |
| iei length display_info | TSC_iei_multi_display COMPLEMENT('00'O) ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Multi_keypad_tx_param(param : DECT_1) | | |
| Structured Type : MULTI_KEYPAD | | |
| Derivation Path : | | |
| Comments : A send constraint for the MULTI_KEYPAD ie, with a parameterized digit in the keypad-info. | | |
| Element Name | Element Value | Comments |
| iei length keypad_info | TSC_iei_multi_keypad '01'O param | 1) |
| Detailed Comments : 1) The actual keypad info is transferred with a parameter. | | |

| Structured Type Constraint Declaration | | |
|--|--|----------|
| Constraint Name : Multi_keypad_tx_1234 | | |
| Structured Type : MULTI_KEYPAD | | |
| Derivation Path : | | |
| Comments : A send constraint for the MULTI_KEYPAD ie, specifying a character string containing the digits 1 to 4. | | |
| Element Name | Element Value | Comments |
| iei length keypad_info | TSC_iei_multi_keypad '04'O TSC_string_1234 | 1) |
| Detailed Comments : 1) A string containing the digits 1 to 4 | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------------|----------|
| Constraint Name : Network_assigned_id_rx_base | | |
| Structured Type : NETWORK_ASSIGNED_ID | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_network_assigned_id | |
| length | COMPLEMENT('00'O) | |
| type | ('1110100'B, '1111111'B) | |
| f3 | '1'B | |
| id_length | ? | |
| f4 | '1'B | |
| value | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------------|---|
| Constraint Name : Network_assigned_id_tx_01 | | |
| Structured Type : NETWORK_ASSIGNED_ID | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_network_assigned_id | |
| length | COMPLEMENT('00'O) | |
| type | '1110100'B | GSM TMSI |
| f3 | '1'B | |
| id_length | '0100000'B | length of TMSI |
| f4 | '1'B | |
| value | TSV_nw_ass_id_tmsi | Initial value or assigned with LOCATE_ACCEPT |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------|
| Constraint Name : Network_header_cc_iut | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of cc messages sent by the IUT | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_cc | |
| transaction_value | TCV_cc_tv | |
| transaction_flag | TCV_cc_iut_tf | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|----------|
| Constraint Name : Network_header_cc_iut_any_tv | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of cc messages sent by the IUT. This constraint is used to receive CC-SETUP messages. It does not put a constraint on the transaction value. This TV will be assigned after receiving the CC-SETUP message. | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_cc | |
| transaction_value | * | |
| transaction_flag | TCV_cc_iut_tf | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|----------|
| Constraint Name : Network_header_cc_lt | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of cc messages sent by the LT | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_cc | |
| transaction_value | TCV_cc_tv | |
| transaction_flag | TCV_cc_lt_tf | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|----------|
| Constraint Name : Network_header_ice_dest | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of ice messages from non initiating party | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_ice | |
| transaction_value | '000'B | |
| transaction_flag | '1'B | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------|
| Constraint Name : Network_header_mm_ori | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of mm messages from initiating party | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_mm | |
| transaction_value | '000'B | |
| transaction_flag | '0'B | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------|
| Constraint Name : Network_header_mm_dest | | |
| Structured Type : NETWORK_HEADER | | |
| Derivation Path : | | |
| Comments : The constraint for the network header in case of mm messages from non initiating party | | |
| Element Name | Element Value | Comments |
| protocol_discriminator | TSC_pd_mm | |
| transaction_value | '000'B | |
| transaction_flag | '1'B | |
| ext_transaction_flag | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------------------|---------------------------------|
| Constraint Name : Network_parameter_rx_base | | |
| Structured Type : NETWORK_PARAMETER | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.7.29 | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_network_parameter | |
| length | ? | |
| discriminator | ? | |
| data_field | ? | for GSM handover ref. - 1 octet |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Portable_id_rx_base | | |
| Structured Type : PORTABLE_ID | | |
| Derivation Path : | | |
| Comments : The basic receive constraint of the PORTABLE_ID ie. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_portable_id | |
| length | ('03'O, '04'O, '05'O, '06'O, '07'O, '08'O, '09'O, '0A'O, '0B'O, '0C'O, '0D'O, '0E'O, '0F'O) | |
| type | ? | |
| f3 | '1'B | |
| length_of_id_value | ? | |
| f4 | '1'B | |
| id_value | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------|
| Constraint Name : Portable_id_empty | | |
| Structured Type : PORTABLE_ID | | |
| Derivation Path : Portable_id_rx_base. | | |
| Comments : A derived constraint for the portable id ie, containing and empty id value, used when in the locate accept message, no TPUI is to be assigned. | | |
| Element Name | Element Value | Comments |
| length | '00'O | |
| type | OMIT | |
| f3 | OMIT | |
| length_of_id_value | OMIT | |
| f4 | OMIT | |
| id_value | OMIT | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--------------------------------|-----------|
| Constraint Name : Portable_id_ipui Structured Type : PORTABLE_ID Derivation Path : Portable_id_rx_base. Comments : The actual value of the IPUI (to be used after subscription) is given as a PIXIT parameter. This constraint can be used for rx and tx. | | |
| Element Name | Element Value | Comments |
| length | TSC_port_id_length_ipui | IPUI type |
| type | '0000000'B | |
| length_of_id_value | INT_TO_BIT(TSC_ipui_length, 7) | |
| id_value | TSPX_ipui_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|--------------------------------|-----------|
| Constraint Name : Portable_id_ipui_unknown Structured Type : PORTABLE_ID Derivation Path : Portable_id_rx_base. Comments : The value of the portable id for 'unknown IPUI', specifying '0' as the IPUI value. This constraint can be used for rx and tx. | | |
| Element Name | Element Value | Comments |
| length | TSC_port_id_length_ipui_unknw | IPUI type |
| type | '0000000'B | |
| length_of_id_value | INT_TO_BIT(TSC_ipui_length, 7) | |
| id_value | INT_TO_BIT(0, TSC_ipui_length) | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--------------------------------|-----------|
| Constraint Name : Portable_id_tpui | | |
| Structured Type : PORTABLE_ID | | |
| Derivation Path : Portable_id_rx_base. | | |
| Comments : A derived send/receive constraint for the portable_id, containing a the TPUI, as specified in the PIXIT | | |
| Element Name | Element Value | Comments |
| length | TSC_port_id_length_tpui | TPUI type |
| type | '0100000'B | |
| length_of_id_value | INT_TO_BIT(TSC_tpui_length, 7) | |
| id_value | TSPX_tpui_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|--------------------------------|-----------|
| Constraint Name : Portable_id_ipei | | |
| Structured Type : PORTABLE_ID | | |
| Derivation Path : Portable_id_rx_base. | | |
| Comments : A derived send constraint of the PORTABLE_ID ie. | | |
| Element Name | Element Value | Comments |
| length | TSC_port_id_length_ipei | IPEI type |
| type | '0010000'B | |
| length_of_id_value | INT_TO_BIT(TSC_ipui_length, 7) | |
| id_value | TSPX_ipei_value | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Progress_indicator_rx_base | | |
| Structured Type : PROGRESS_INDICATOR | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_progress_indicator | |
| length | '02'O | |
| location | ('0000'B, '0001'B, '0010'B, '0100'B, '0101'B, '1010'B) | |
| coding_standard | '000'B | |
| f3 | '1'B | |
| progress_description | ('0000001'B, '0000010'B, '0000011'B, '0000100'B, '0001000'B) | |
| f4 | '1'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------|----------------|
| Constraint Name : Rand_rx_base | | |
| Structured Type : RAND | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the RAND ie | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_rand | |
| length | '16'O | 128 bits (GSM) |
| field | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-------------------------------------|----------|
| Constraint Name : Reject_reason_rx_base | | |
| Structured Type : REJECT_REASON | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for reject reason | | |
| Element Name | Element Value | Comments |
| iei length reason | TSC_iei_reject_reason '01'O ? | |
| Detailed Comments : See subclause 7.7.34. | | |

| Structured Type Constraint Declaration | | |
|---|-----------------------------|----------|
| Constraint Name : Release_reason_rx_base | | |
| Structured Type : RELEASE_REASON | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei reason | TSC_iei_release_reason ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---|--|
| Constraint Name : Res_tx_64_bit | | |
| Structured Type : RES | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the RES ie. This actual value for the field will be filled in in the testcase | | |
| Element Name | Element Value | Comments |
| iei length field | TSC_iei_res '08'O INT_TO_BIT(0, 32) | 64 bits To be filled in in the testcase |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|---------------|----------|
| Constraint Name : Sending_complete | | |
| Structured Type : SENDING_COMPLETE | | |
| Derivation Path : | | |
| Comments : The constraint for the SENDING COMPLETE ie. | | |
| Element Name | Element Value | Comments |
| sending_complete | 'A1'O | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|--------------------------|----------|
| Constraint Name : Setup_capability_gsm | | |
| Structured Type : SETUP_CAPABILITY | | |
| Derivation Path : | | |
| Comments : The basic send constraint for SETUP_CAPABILITY towards a GSM network | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_setup_capability | |
| length | '01'O | |
| page | '01'B | |
| setup | '01'B | |
| f3 | '000'B | |
| ext3 | '0'B | |
| profile_indicator | '100'B | |
| f3a | '10000'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|----------------|----------|
| Constraint Name : Signal_rx_base | | |
| Structured Type : SIGNAL | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.8. | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_signal | |
| signal_value | ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-------------------------|-------------|
| Constraint Name : Signal_rx_alerting | | |
| Structured Type : SIGNAL | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.8. | | |
| Element Name | Element Value | Comments |
| iei signal_value | TSC_iei_signal '40'O | Alerting on |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|-----------------------------|--------------------------------|
| Constraint Name : Single_display_rx_base | | |
| Structured Type : SINGLE_DISPLAY | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.5. Only in FT to PT. | | |
| Element Name | Element Value | Comments |
| iei display_info | TSC_iei_single_display ? | Only DECT character 1 Octet |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|---|--------------------------------|----------|
| Constraint Name : Test_hook_contr_rx_base | | |
| Structured Type : TEST_HOOK_CONTROL | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.10 | | |
| Element Name | Element Value | Comments |
| iei hook_value | TSC_iei_test_hook_control ? | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|--------------------------------|----------|
| Constraint Name : Timer_restart_rx_base | | |
| Structured Type : TIMER_RESTART | | |
| Derivation Path : | | |
| Comments : ETS 300 175-5 [5], subclause 7.6.9 | | |
| Element Name | Element Value | Comments |
| iei restart_value | TSC_iei_timer_restart '00'O | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|-----------------------|----------|
| Constraint Name : Transit_delay_rx_base | | |
| Structured Type : TRANSIT_DELAY | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_transit_delay | |
| length | '02'O | |
| forward_delay | ? | |
| f3 | '10'B | |
| backward_delay | ? | |
| f4 | '10'B | |
| Detailed Comments : | | |

| Structured Type Constraint Declaration | | |
|--|---------------------|----------|
| Constraint Name : Window_size_rx_base | | |
| Structured Type : WINDOW_SIZE | | |
| Derivation Path : | | |
| Comments : | | |
| Element Name | Element Value | Comments |
| iei | TSC_iei_window_size | |
| length | '02'O | |
| forward_value | ? | |
| f3 | '1'B | |
| backward_value | ? | |
| f4 | '1'B | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|---|--|--|
| Constraint Name : DI_brc_ind(nwk_pdu : PDU) | | |
| ASP Type : DL_BROADCAST_IND | | |
| Derivation Path : | | |
| Comments : This constraint contains a PDU | | |
| Parameter Name | Parameter Value | Comments |
| cluster_address_list | OMIT | |
| message_unit | nwk_pdu | |
| extended_message_flag | '0'B | Short paging |
| error_flag | (TSC_iei_error_flag_on, TSC_iei_error_flag_off) | '1'B means CRC error occurred in MAC-PAGE-ind primitive |
| Detailed Comments : This primitive is not used in PT testing. The message unit length information element is not used in this primitive | | |

| ASP Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : DI_data_ind(nwk_pdu : PDU) | | |
| ASP Type : DL_DATA_IND | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| message_unit | nwk_pdu | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|---|-----------------|----------|
| Constraint Name : DI_data_req(nwk_pdu : PDU) | | |
| ASP Type : DL_DATA_REQ | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| message_unit | nwk_pdu | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : DI_enc_ind(param : CIPHER_STATUS) | | |
| ASP Type : DL_ENCRYPT_IND | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| connection_identities | ? IF_PRESENT | |
| encryption_status | param | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : DI_enc_req(param : CIPHER_STATUS) | | |
| ASP Type : DL_ENCRYPT_REQ | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| connection_identities | OMIT | |
| encryption_command | param | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|---|-----------------|----------|
| Constraint Name : DI_enc_key_req(param : ENCRYPTION_KEY) | | |
| ASP Type : DL_ENC_KEY_REQ | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| connection_identities | OMIT | |
| encryption_key | param | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|-------------------------------------|-----------------|----------|
| Constraint Name : DI_est_cfm | | |
| ASP Type : DL_ESTABLISH_CFM | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : DI_est_req_no_pdu | | |
| ASP Type : DL_ESTABLISH_REQ | | |
| Derivation Path : | | |
| Comments : This constraint does not contain a PDU. The dlei value will be specified in the PIXIT. | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| establish_mode | TSC_em_class_a | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|--|-----------------|----------|
| Constraint Name : DI_est_req_pdu(nwk_pdu : PDU) | | |
| ASP Type : DL_ESTABLISH_REQ | | |
| Derivation Path : | | |
| Comments : This constraint for the DL_ESTABLISH_REQ contains a PDU. | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| establish_mode | TSC_em_class_a | |
| message_unit | nwk_pdu | |
| Detailed Comments : For now this primitive is used in FT testing only. The message unit length information element is not used in this primitive | | |

| ASP Constraint Declaration | | |
|-------------------------------------|----------------------------------|----------|
| Constraint Name : DI_rel_cfm | | |
| ASP Type : DL_RELEASE_CFM | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier | TSPX_dlei_value | |
| release_mode | (TSC_rm_normal, TSC_rm_abnormal) | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|---|---|----------|
| Constraint Name : DL_rel_ind | | |
| ASP Type : DL_RELEASE_IND | | |
| Derivation Path : | | |
| Comments : The constraint for the DL_RELEASE_IND ASP | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier release_mode | TSPX_dlei_value (TSC_rm_normal, TSC_rm_abnormal) | |
| Detailed Comments : | | |

| ASP Constraint Declaration | | |
|---|--------------------------|----------|
| Constraint Name : DL_rel_req(param : RELEASE_MODE) | | |
| ASP Type : DL_RELEASE_REQ | | |
| Derivation Path : | | |
| Comments : | | |
| Parameter Name | Parameter Value | Comments |
| data_link_endpoint_identifier release_mode | TSPX_dlei_value param | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------------|----------------------------------|
| Constraint Name : Auth_reply_tx_base | | |
| PDU Type : AUTH_REPLY | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the AUTH_REPLY message(PT->FT) | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_auth_reply | M |
| res | OMIT | M (t.b.s. in derived constraint) |
| rs | OMIT | N |
| zap_field | OMIT | O |
| service_class | OMIT | O |
| key | OMIT | O |
| iwu_to_iwu | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---------------|---------------------------------|
| Constraint Name : Auth_reply_tx01 | | |
| PDU Type : AUTH_REPLY | | |
| Derivation Path : Auth_reply_tx_base. | | |
| Comments : The derived send constraint for the AUTH_REPLY message(PT->FT) | | |
| Field Name | Field Value | Comments |
| res | Res_tx_64_bit | To be filled in in the testcase |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|-----------------------|----------|
| Constraint Name : Auth_request_rx_base | | |
| PDU Type : AUTH_REQUEST | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the authenticate request PDU, for FT initiated PT authentication | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_ori | M |
| message_type | TSC_mt_auth_request | M |
| auth_type | Auth_type_rx_base | M |
| rand | Rand_rx_base | M |
| res | OMIT | N |
| rs | OMIT | O |
| cipher_info | OMIT | O |
| iwu_to_iwu | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|-------------------------|----------|
| Constraint Name : Auth_request_rx04 | | |
| PDU Type : AUTH_REQUEST | | |
| Derivation Path : Auth_request_rx_base. | | |
| Comments : The derived receive constraint for the authenticate request PDU, for FT initiated PT authentication | | |
| Field Name | Field Value | Comments |
| auth_type | Auth_type_rx_dck_no_zap | 1) |
| rand | Rand_rx_base | |
| Detailed Comments : 1) auth_type specifies dck to be stored, zap value not increased. | | |

| PDU Constraint Declaration | | |
|--|----------------------------------|----------------------------------|
| Constraint Name : Cipher_request_rx_base | | |
| PDU Type : CIPHER_REQUEST | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the CIPHER_REQUEST PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_ori | M |
| message_type | TSC_mt_cipher_request | M |
| cipher_info | Cipher_info_rx_base | M (t.b.s. in derived constraint) |
| call_identity | Call_id_rx_base IF_PRESENT | O |
| connection_identity | Connection_id_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|----------------------|----------|
| Constraint Name : Cipher_request_rx03 | | |
| PDU Type : CIPHER_REQUEST | | |
| Derivation Path : Cipher_request_rx_base. | | |
| Comments : A derived receive constraint for the CIPHER_REQUEST PDU., specifying ciphering on with DECT standard ciphering algorithm and valid CKSN | | |
| Field Name | Field Value | Comments |
| cipher_info | Cipher_info_gsm_send | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------------------|----------|
| Constraint Name : Cipher_request_rx04 | | |
| PDU Type : CIPHER_REQUEST | | |
| Derivation Path : Cipher_request_rx_base. | | |
| Comments : A derived receive constraint for the CIPHER_REQUEST PDU., specifying ciphering off with DECT standard ciphering algorithm and valid CKSN | | |
| Field Name | Field Value | Comments |
| cipher_info | Cipher_info_gsm_send_disable | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--|------------------------------------|
| Constraint Name : Cc_alerting_rx_base | | |
| PDU Type : CC_ALERTING | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_alerting PDU, for outgoing call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_alerting | M |
| call_attributes | Call_attributes_rx_base IF_PRESENT | O |
| connection_id | Connection_id_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O (version 2 of ETS 300 175-5 [5]) |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| terminal_capability | OMIT | N |
| transit_delay | Transit_delay_rx_base IF_PRESENT | O |
| window_size | Window_size_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|----------------------|------------------------------------|
| Constraint Name : Cc_alerting_tx_base | | |
| PDU Type : CC_ALERTING | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the cc_alerting PDU, for incomming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_alerting | M |
| call_attributes | OMIT | O |
| connection_id | OMIT | O |
| facility | OMIT | O (version 2 of ETS 300 175-5 [5]) |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| signal | OMIT | N |
| feature_indicate | OMIT | N |
| terminal_capability | OMIT | O |
| transit_delay | OMIT | O |
| window_size | OMIT | O |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Cc_call_proc_rx_base PDU Type : CC_CALL_PROC Derivation Path : Comments : A basic receive constraint for the cc_call_proceeding PDU, for outgoing call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_call_proc | M |
| call_attributes | Call_attributes_rx_base IF_PRESENT | O |
| connection_id | Connection_id_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| transit_delay | Transit_delay_rx_base IF_PRESENT | O |
| window_size | Window_size_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| Field Name | Field Value | Comments |
|----------------------------|--|----------|
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_call_proc | M |
| call_attributes | Call_attributes_rx_base IF_PRESENT | O |
| connection_id | Connection_id_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| transit_delay | Transit_delay_rx_base IF_PRESENT | O |
| window_size | Window_size_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Cc_connect_rx_base | | |
| PDU Type : CC_CONNECT | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_connect PDU, for outgoing call. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_connect | M |
| call_attributes | Call_attributes_rx_base IF_PRESENT | O |
| connection_id | Connection_id_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| terminal_capability | OMIT | N |
| transit_delay | Transit_delay_rx_base IF_PRESENT | O |
| window_size | Window_size_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|----------------------|----------|
| Constraint Name : Cc_connect_tx_base | | |
| PDU Type : CC_CONNECT | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the cc_connect PDU, for incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_connect | M |
| call_attributes | OMIT | O |
| connection_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| signal | OMIT | N |
| feature_indicate | OMIT | N |
| terminal_capability | OMIT | O |
| transit_delay | OMIT | O |
| window_size | OMIT | O |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--|----------|
| Constraint Name : Cc_connect_ack_rx_base | | |
| PDU Type : CC_CONNECT_ACK | | |
| Derivation Path : | | |
| Comments : A basic receive constraint for the cc_connect_ack PDU, for incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_connect_ack | M |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---|----------|
| Constraint Name : Cc_info_rx_base | | |
| PDU Type : CC_INFO | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_info PDU, for either outgoing or incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | N |
| network_assigned_id | OMIT | N |
| facility | Facility_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| multi_keypad | OMIT | N |
| single_keypad | OMIT | N |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_activate | OMIT | N |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| network_parameter | OMIT | N |
| called_party_number | Called_party_number_rx_base IF_PRESENT | O |
| called_party_subaddress | Called_party_subaddress_rx_base IF_PRESENT | O |
| sending_complete | Sending_complete IF_PRESENT | O |
| test_hook_control | Test_hook_contr_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|----------------------|----------|
| Constraint Name : Cc_info_tx_base PDU Type : CC_INFO Derivation Path : Comments : The basic send constraint for the cc_info PDU, for either outgoing or incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | OMIT | O |
| called_party_subaddress | OMIT | O |
| sending_complete | OMIT | O |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| Field Name | Field Value | Comments |
|----------------------------|----------------------|----------|
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | OMIT | O |
| called_party_subaddress | OMIT | O |
| sending_complete | OMIT | O |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------------------|----------|
| Constraint Name : Cc_info_tx06(param : DECT_1) | | |
| PDU Type : CC_INFO | | |
| Derivation Path : | | |
| Comments : A second base constraint for the CC_INFO PDU, for either outgoing or incoming call, specifying a parameterized digit in the multi-keypad ie. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | Multi_keypad_tx_param(param) | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | OMIT | O |
| called_party_subaddress | OMIT | O |
| sending_complete | OMIT | O |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|----------------------|----------|
| Constraint Name : Cc_info_tx07 | | |
| PDU Type : CC_INFO | | |
| Derivation Path : Cc_info_tx_base. | | |
| Comments : A derived send constraint for the cc_info PDU, for outgoing call , specifying a multi-keypad ie, containing the digits 1 to 4. | | |
| Field Name | Field Value | Comments |
| multi_keypad | Multi_keypad_tx_1234 | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|----------------------|----------|
| Constraint Name : Cc_info_tx08 PDU Type : CC_INFO Derivation Path : Comments : A base constraint for the cc_info PDU, for either outgoing or incoming call, specifying the sending-complete ie | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_lt | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | OMIT | O |
| called_party_subaddress | OMIT | O |
| sending_complete | Sending_complete | M |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| Field Name | Field Value | Comments |
|-------------------------|----------------------|----------|
| network_header | Network_header_cc_lt | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | OMIT | O |
| called_party_subaddress | OMIT | O |
| sending_complete | Sending_complete | M |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |

| PDU Constraint Declaration | | |
|---|------------------------------|----------|
| Constraint Name : Cc_info_tx09 | | |
| PDU Type : CC_INFO | | |
| Derivation Path : | | |
| Comments : A base constraint for the cc_info PDU, for either outgoing or incoming call, specifying the called_party_number and the sending-complete ie | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_lt | M |
| message_type | TSC_mt_cc_info | M |
| location_area | OMIT | O |
| network_assigned_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| called_party_number | Called_party_number_tx_pixit | M |
| called_party_subaddress | OMIT | O |
| sending_complete | Sending_complete | M |
| test_hook_control | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-----------------------|----------|
| Constraint Name : Cc_notify_rx01 | | |
| PDU Type : CC_NOTIFY | | |
| Derivation Path : | | |
| Comments : A receive constraint for the cc_notify PDU, to restart a timer | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_notify | M |
| timer_restart | Timer_restart_rx_base | M |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--|------------------------------------|
| Constraint Name : Cc_release_rx_base | | |
| PDU Type : CC_RELEASE | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_release PDU, for either outgoing or incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_release | M |
| release_reason | Release_reason_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O (version 2 of ETS 300 175-5 [5]) |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|----------------------|------------------------------------|
| Constraint Name : Cc_release_tx_base | | |
| PDU Type : CC_RELEASE | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the cc_release PDU, for either outgoing or incoming call. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_lt | M |
| message_type | TSC_mt_cc_release | M |
| release_reason | OMIT | O |
| facility | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| feature_indicate | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| progress_indicator | OMIT | O (version 2 of ETS 300 175-5 [5]) |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---|------------------------------------|
| Constraint Name : Cc_release_com_rx_base | | |
| PDU Type : CC_RELEASE_COM | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_release_com PDU, for either outgoing or incoming call NOT COMPLETED | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_cc_release_com | M |
| release_reason | Release_reason_rx_base IF_PRESENT | O |
| identity_type | Identity_type_rx_base IF_PRESENT | O |
| location_area | Location_area_rx_base IF_PRESENT | O |
| iwu_attributes | Iwu_attributes_rx_base IF_PRESENT | O |
| facility | Facility_rx_base IF_PRESENT | O (version 2 of ETS 300 175-5 [5]) |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| network_parameter | Network_parameter_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-----------------------|------------------------------------|
| Constraint Name : Cc_release_com_tx_base | | |
| PDU Type : CC_RELEASE_COM | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the cc_release_com PDU, for either outgoing or incoming call | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_release_com | M |
| release_reason | OMIT | O |
| identity_type | OMIT | N |
| location_area | OMIT | N |
| iwu_attributes | OMIT | O |
| facility | OMIT | O (version 2 of ETS 300 175-5 [5]) |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| Field Name | Field Value | Comments |
|----------------------------|-----------------------|------------------------------------|
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_release_com | M |
| release_reason | OMIT | O |
| identity_type | OMIT | N |
| location_area | OMIT | N |
| iwu_attributes | OMIT | O |
| facility | OMIT | O (version 2 of ETS 300 175-5 [5]) |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | N |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---|---|
| Constraint Name : Cc_setup_rx_base | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the cc_setup PDU, for incoming call. Note that the Network header constraint allows any TV to occur. The TV value will be assigned in the testcase. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut_any_tv | M |
| message_type | TSC_mt_cc_setup | M |
| portable_id | Portable_id_rx_base | M |
| fixed_id | Fixed_id_rx_base | M |
| basic_service | Basic_service_rx_base | M |
| | | The Basic_service_rx_base constraint will specify 'default attributes', so lwu_attributes and call attributes and end_to_end_compatibility are not allowed. |
| iwu_attributes | OMIT | O (default attributes) |
| repeat_indicator_1 | OMIT | O (default attributes) |
| call_attributes | OMIT | O (default attributes) |
| repeat_indicator_2 | OMIT | O (default attributes) |
| connection_attributes | OMIT | O (only in advanced MAC connections) |
| cipher_info | Cipher_info_rx_base IF_PRESENT | O |
| connection_id | OMIT | O (only in advanced MAC connections) |
| facility | Facility_rx_base IF_PRESENT | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | O |
| multi_display | Multi_display_rx_base IF_PRESENT | O |
| single_display | Single_display_rx_base IF_PRESENT | O |
| multi_keypad | OMIT | N |
| single_keypad | OMIT | N |
| signal | Signal_rx_base IF_PRESENT | O |
| feature_activate | OMIT | N |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | O |
| network_parameter | OMIT | N |
| terminal_capability | OMIT | N |
| end_to_end_compatibility | OMIT | O (default attributes) |
| rate_parameters | OMIT | O (data services only) |
| transit_delay | OMIT | O (data services only) |
| window_size | OMIT | O (data services only) |
| calling_party_number | Calling_party_number_rx_base IF_PRESENT | O |
| called_party_number | Called_party_number_rx_base IF_PRESENT | O |

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| PDU Constraint Declaration | | |
|----------------------------|---------------------------------|----------|
| Field Name | Field Value | Comments |
| called_party_subaddress | Called_party_subaddress_rx_base | O |
| | IF_PRESENT | |
| sending_complete | Sending_complete IF_PRESENT | O |
| iwu_to_iwu | lwu_to_iwu_rx_base IF_PRESENT | O |
| iwu_packet | lwu_packet_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--------------------------|-------------|
| Constraint Name : Cc_setup_rx06 | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : Cc_setup_rx_base. | | |
| Comments : A receive constraint for the cc_setup PDU, for incoming call(invoked by the MSC(GSM)) | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | ARI D + RPN |
| fixed_id | Fixed_id_ari_rpn | |
| basic_service | Basic_service_tx_default | |
| signal | OMIT | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--------------------------|-------------|
| Constraint Name : Cc_setup_rx07 | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : Cc_setup_rx_base. | | |
| Comments : A receive constraint for the cc_setup PDU, for incoming call(invoked by the MSC(GSM)) with <<signal>> ie containing alerting | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | ARI D + RPN |
| fixed_id | Fixed_id_ari_rpn | |
| basic_service | Basic_service_tx_default | |
| signal | Signal_rx_alerting | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|----------------------|----------------------------------|
| Constraint Name : Cc_setup_tx_base | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the cc_setup PDU, for outgoing call. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_it | M |
| message_type | TSC_mt_cc_setup | M |
| portable_id | OMIT | M (t.b.s. in derived constraint) |
| fixed_id | OMIT | M (t.b.s. in derived constraint) |
| basic_service | OMIT | M (t.b.s. in derived constraint) |
| iwu_attributes | OMIT | O |
| repeat_indicator_1 | OMIT | O |
| call_attributes | OMIT | O |
| repeat_indicator_2 | OMIT | O |
| connection_attributes | OMIT | O |
| cipher_info | OMIT | M(t.b.s in derived constraint) |
| connection_id | OMIT | O |
| facility | OMIT | O |
| progress_indicator | OMIT | N |
| multi_display | OMIT | N |
| single_display | OMIT | N |
| multi_keypad | OMIT | O |
| single_keypad | OMIT | O |
| signal | OMIT | N |
| feature_activate | OMIT | O |
| feature_indicate | OMIT | N |
| network_parameter | OMIT | O |
| terminal_capability | OMIT | O |
| end_to_end_compatibility | OMIT | O |
| rate_parameters | OMIT | O |
| transit_delay | OMIT | O |
| window_size | OMIT | O |
| calling_party_number | OMIT | O |
| called_party_number | OMIT | M(t.b.s. in derived constraint) |
| called_party_subaddress | OMIT | O |
| sending_complete | OMIT | O |
| iwu_to_iwu | OMIT | O |
| iwu_packet | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|----------------------|----------|
| Constraint Name : Cc_setup_tx01 | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : Cc_setup_tx_base. | | |
| Comments : A derived send constraint for the cc_setup PDU, for outgoing call. No called party number included. | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | |
| fixed_id | Fixed_id_gsm | 1) |
| basic_service | Basic_service_tx_gsm | 2) |
| cipher_info | Cipher_info_gsm | |
| Detailed Comments : 1) The Fixed_id_gsm has 0 length contents 2) The Basic_service_tx_default constraint specifies 'basic speech default attribtues', so lwu_attributes, call attributes and end_to_end_compatibility are not allowed. | | |

| PDU Constraint Declaration | | |
|--|------------------------------|----------|
| Constraint Name : Cc_setup_tx02 | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : Cc_setup_tx_base. | | |
| Comments : A derived send constraint for the cc_setup PDU, for outgoing call with a called party number. | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | |
| fixed_id | Fixed_id_gsm | 1) |
| basic_service | Basic_service_tx_default | 2) |
| called_party_number | Called_party_number_tx_pixit | |
| sending_complete | Sending_complete | |
| Detailed Comments : 1) The Fixed_id_gsm has 0 length contents 1) The Basic_service_tx_default constraint specifies 'basic speech default attribtues', so lwu_attributes, call attributes and end_to_end_compatibility are not allowed. | | |

| PDU Constraint Declaration | | |
|---|------------------------------|---------------------------------|
| Constraint Name : Cc_setup_tx04 | | |
| PDU Type : CC_SETUP | | |
| Derivation Path : Cc_setup_tx_base. | | |
| Comments : A derived send constraint for the cc_setup PDU, for outgoing call with a called party number and the <<basic_service>>ie containing emergency call. Portable type is IPUI | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | IPUI type |
| fixed_id | Fixed_id_gsm | fixed_id with 0 length contents |
| basic_service | Basic_service_tx_emergency | emergency call |
| called_party_number | Called_party_number_tx_pixit | |
| sending_complete | Sending_complete | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | | |
|---|--|--|----------|
| Constraint Name : Cc_setup_ack_rx_base | | | |
| PDU Type : CC_SETUP_ACK | | | |
| Derivation Path : | | | |
| Comments : The basic receive constraint for the cc_setup_ack PDU, for outgoing call See also ETS 300 444, subclause 8.3. No progress indicator included | | | |
| Field Name | Field Value | | Comments |
| network_header | Network_header_cc_iut | | M |
| message_type | TSC_mt_cc_setup_ack | | M |
| info_type | Info_type_rx_base IF_PRESENT | | O |
| portable_id | Portable_id_ipui IF_PRESENT | | O |
| fixed_id | Fixed_id_rx_base IF_PRESENT | | O |
| location_area | Location_area_rx_base IF_PRESENT | | O |
| call_attributes | Call_attributes_rx_base IF_PRESENT | | O |
| connection_id | Connection_id_rx_base IF_PRESENT | | O |
| facility | Facility_rx_base IF_PRESENT | | O |
| progress_indicator | Progress_indicator_rx_base IF_PRESENT | | O |
| multi_display | Multi_display_rx_base IF_PRESENT | | O |
| single_display | Single_display_rx_base IF_PRESENT | | O |
| signal | Signal_rx_base IF_PRESENT | | O |
| feature_indicate | Feature_indicate_rx_base IF_PRESENT | | O |
| transit_delay | Transit_delay_rx_base IF_PRESENT | | O |
| window_size | Window_size_rx_base IF_PRESENT | | O |
| delimiter_request | Delimiter_request_rx_base | | M |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | | O |
| iwu_packet | Iwu_packet_rx_base IF_PRESENT | | O |
| Detailed Comments : | | | |

| PDU Constraint Declaration | | | |
|--|---------------------------|--|----------|
| Constraint Name : Detach_tx_base | | | |
| PDU Type : DETACH | | | |
| Derivation Path : | | | |
| Comments : The basic send constraint for the locate_request PDU | | | |
| Field Name | Field Value | | Comments |
| network_header | Network_header_mm_dest | | M |
| message_type | TSC_mt_detach | | M |
| portable_id | Portable_id_ipui | | M |
| network_assigned_id | Network_assigned_id_tx_01 | | M |
| iwu_to_iwu | OMIT | | O |
| Detailed Comments : | | | |

| PDU Constraint Declaration | | |
|--|------------------------|----------|
| Constraint Name : Identity_reply_tx_base | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the IDENTITY_REPLY PDU | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_identity_reply | M |
| repeat_indicator_1 | OMIT | O |
| portable_id | OMIT | O |
| repeat_indicator_2 | OMIT | O |
| fixed_id | OMIT | O |
| repeat_indicator_3 | OMIT | O |
| network_assigned_id | OMIT | O |
| iwu_to_iwu | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------|----------|
| Constraint Name : Identity_reply_tx01 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------|----------|
| Constraint Name : Identity_reply_tx02 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipei | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|------------------|----------|
| Constraint Name : Identity_reply_tx03 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU, specifying a TPUI | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_tpui | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|---------------|----------|
| Constraint Name : Identity_reply_tx04 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU, specifying a PARK | | |
| Field Name | Field Value | Comments |
| fixed_id | Fixed_id_park | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--------------|----------|
| Constraint Name : Identity_reply_tx05 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : A derived send constraint for the IDENTITY_REPLY PDU, specifying a fixed id with an ARI | | |
| Field Name | Field Value | Comments |
| fixed_id | Fixed_id_ari | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|------------------|----------|
| Constraint Name : Identity_reply_tx06 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU, specifying a fixed id ARI + RPN | | |
| Field Name | Field Value | Comments |
| fixed_id | Fixed_id_ari_rpn | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---------------------------|----------|
| Constraint Name : Identity_reply_tx08 | | |
| PDU Type : IDENTITY_REPLY | | |
| Derivation Path : Identity_reply_tx_base. | | |
| Comments : The derived send constraint for the IDENTITY_REPLY PDU | | |
| Field Name | Field Value | Comments |
| network_assigned_id | Network_assigned_id_tx_01 | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-------------------------------|----------------------------------|
| Constraint Name : Identity_request_rx_base | | |
| PDU Type : IDENTITY_REQUEST | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the IDENTITY_REQUEST PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_ori | M |
| message_type | TSC_mt_identity_request | M |
| repeat_indicator | OMIT | N (according to 300 444 8.19) |
| identity_type | Identity_type_rx_base | M (t.b.s. in derived constraint) |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--------------------|----------|
| Constraint Name : Identity_request_rx01 | | |
| PDU Type : IDENTITY_REQUEST | | |
| Derivation Path : Identity_request_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_REQUEST PDU, specifying a portable id, IPUI request. | | |
| Field Name | Field Value | Comments |
| identity_type | Identity_type_ipui | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--------------------|----------|
| Constraint Name : Identity_request_rx02 | | |
| PDU Type : IDENTITY_REQUEST | | |
| Derivation Path : Identity_request_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_REQUEST PDU, specifying a portable id, IPEI request. | | |
| Field Name | Field Value | Comments |
| identity_type | Identity_type_ipei | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--------------------|----------|
| Constraint Name : Identity_request_rx03 | | |
| PDU Type : IDENTITY_REQUEST | | |
| Derivation Path : Identity_request_rx_base. | | |
| Comments : A derived receive constraint for the IDENTITY_REQUEST PDU, specifying a network assigned id, TMSI(GSM) request. | | |
| Field Name | Field Value | Comments |
| identity_type | Identity_type_tmsi | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--------------------------|----------------------------------|
| Constraint Name : Lce_page_response_tx_base | | |
| PDU Type : LCE_PAGE_RESPONSE | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the lce_page_response PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_lce_dest | M |
| message_type | TSC_mt_lce_page_response | M |
| portable_id | OMIT | M (t.b.s. in derived constraint) |
| fixed_id | OMIT | O |
| network_assigned_id | OMIT | M (t.b.s. in derived constraint) |
| cipher_info | OMIT | M (t.b.s. in derived constraint) |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---------------------------|----------|
| Constraint Name : Lce_page_response_tx03 | | |
| PDU Type : LCE_PAGE_RESPONSE | | |
| Derivation Path : Lce_page_response_tx_base. | | |
| Comments : The derived send constraint for the lce_page_response PDU. | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | |
| network_assigned_id | Network_assigned_id_tx_01 | |
| cipher_info | Cipher_info_gsm_send | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-------------|----------|
| Constraint Name : Lce_request_page_rx01(param : LCE_HEADER) | | |
| PDU Type : LCE_REQUEST_PAGE | | |
| Derivation Path : | | |
| Comments : The derived constraint for the LCE_REQUEST_PAGE message The parameter indicates paging for CC services (with U-plane) or MM services (only C-plane) | | |
| Field Name | Field Value | Comments |
| lce_header | param | M |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-------------------------------|----------------------------------|
| Constraint Name : Locate_accept_rx_base | | |
| PDU Type : LOCATE_ACCEPT | | |
| Derivation Path : | | |
| Comments : The basic receive constraint for the LOCATE_ACCEPT PDU. An empty Portable id is present, no TPUI assignment is done. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_cc_iut | M |
| message_type | TSC_mt_locate_accept | M |
| portable_id | Portable_id_rx_base | M (t.b.s. in derived constraint) |
| location_area | Location_area_rx_base | M (t.b.s. in derived constraint) |
| network_assigned_id | Network_assigned_id_rx_base | O |
| duration | Duration_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--|----------|
| Constraint Name : Locate_accept_rx01 | | |
| PDU Type : LOCATE_ACCEPT | | |
| Derivation Path : Locate_accept_rx_base. | | |
| Comments : A derived send constraint for the LOCATE_ACCEPT PDU. It can be with or without TPUI assignment. (empty portable_id) | | |
| Field Name | Field Value | Comments |
| portable_id | (Portable_id_empty, Portable_id_tpui) | 1) |
| location_area | Location_area_rx_lal_and_eli | |
| network_assigned_id | Network_assigned_id_rx_base | |
| Detailed Comments : 1) Either with or without TPUI assignment | | |

| PDU Constraint Declaration | | |
|---|--|----------|
| Constraint Name : Locate_accept_rx02 | | |
| PDU Type : LOCATE_ACCEPT | | |
| Derivation Path : Locate_accept_rx_base. | | |
| Comments : A derived send constraint for the LOCATE_ACCEPT PDU. It can be with or without TPUI assignment. (empty portable_id) | | |
| Field Name | Field Value | Comments |
| portable_id | (Portable_id_empty, Portable_id_tpui) | 1) |
| location_area | Location_area_rx_lal_and_eli | |
| Detailed Comments : 1) Either with or without TPUI assignment | | |

| PDU Constraint Declaration | | |
|--|-----------------------------|----------|
| Constraint Name : Locate_reject_rx_base | | |
| PDU Type : LOCATE_REJECT | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the LOCATE_REJECT PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_locate_reject | M |
| reject_reason | Reject_reason_rx_base | M |
| duration | Duration_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|------------------------------|----------|
| Constraint Name : Locate_request_tx_base | | |
| PDU Type : LOCATE_REQUEST | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the locate_request PDU | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_locate_request | M |
| portable_id | Portable_id_ipui | M |
| fixed_id | Fixed_id_ari_rpn | M |
| location_area | Location_area_tx_lal_and_eli | M |
| network_assigned_id | Network_assigned_id_tx_01 | M |
| cipher_info | Cipher_info_gsm_send | M |
| setup_capability | Setup_capability_gsm | M |
| terminal_capability | OMIT | O |
| iwu_to_iwu | OMIT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|------------------------------|----------|
| Constraint Name : Locate_request_tx01 | | |
| PDU Type : LOCATE_REQUEST | | |
| Derivation Path : Locate_request_tx_base. | | |
| Comments : A derived send constraint for the locate_request PDU. See table 41 in ETS 300 444, subclause 8.25 | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui | |
| fixed_id | Fixed_id_ari_rpn | |
| location_area | Location_area_tx_lal_and_eli | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--------------------------|----------|
| Constraint Name : Locate_request_tx02 | | |
| PDU Type : LOCATE_REQUEST | | |
| Derivation Path : Locate_request_tx_base. | | |
| Comments : A derived send constraint for the locate_request PDU with the <<portable id>>ie containig unknown IPUI. | | |
| Field Name | Field Value | Comments |
| portable_id | Portable_id_ipui_unknown | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Locate_request_tx03 | | |
| PDU Type : LOCATE_REQUEST | | |
| Derivation Path : Locate_request_tx_base. | | |
| Comments : A derived send constraint for the locate_request PDU with the <<location_area>>ie containing an unknown PLMN. | | |
| Field Name | Field Value | Comments |
| location_area | Location_area_tx_lal_and_eli_unknow n_plmn | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|--|----------|
| Constraint Name : Locate_request_tx04 | | |
| PDU Type : LOCATE_REQUEST | | |
| Derivation Path : Locate_request_tx_base. | | |
| Comments : A derived send constraint for the locate_request PDU with the <<location_area>>ie containing an unknown LAC. | | |
| Field Name | Field Value | Comments |
| location_area | Location_area_tx_lal_and_eli_unknow n_lac | |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|---|----------------------------------|
| Constraint Name : Mm_info_suggest_rx_base | | |
| PDU Type : MM_INFO_SUGGEST | | |
| Derivation Path : | | |
| Comments : The basic send constraint for the MM_INFO_SUGGEST PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_ori | M |
| message_type | TSC_mt_mm_info_suggest | M |
| info_type | Info_type_rx_locate_suggest | M (t.b.s. in derived constraint) |
| fixed_id | Fixed_id_rx_base IF_PRESENT | O |
| location_area | Location_area_rx_base IF_PRESENT | O |
| network_assigned_id | Network_assigned_id_rx_base IF_PRESENT | O |
| network_parameter | Network_parameter_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|--------------------------------|----------|
| Constraint Name : Temporary_id_assign_ack_tx_base | | |
| PDU Type : TEMPORARY_ID_ASSIGN_ACK | | |
| Derivation Path : | | |
| Comments : The basic constraint for the TEMPORARY_ID_ASSIGN_ACK PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_temporary_id_assign_ack | M |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|---|---|----------|
| Constraint Name : Temporary_id_assign_rx_base | | |
| PDU Type : TEMPORARY_ID_ASSIGN | | |
| Derivation Path : | | |
| Comments : The basic constraint for the TEMPORARY_ID_ASSIGN PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_temporary_id_assign | M |
| portable_id | Portable_id_rx_base IF_PRESENT | O |
| network_assigned_id | Network_assigned_id_rx_base IF_PRESENT | O |
| duration | Duration_rx_base IF_PRESENT | O |
| iwu_to_iwu | Iwu_to_iwu_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

| PDU Constraint Declaration | | |
|--|-------------------------------------|----------|
| Constraint Name : Temporary_id_assign_rej_tx_base | | |
| PDU Type : TEMPORARY_ID_ASSIGN_REJECT | | |
| Derivation Path : | | |
| Comments : The basic constraint for the TEMPORARY_ID_ASSIGN_REJECT PDU. | | |
| Field Name | Field Value | Comments |
| network_header | Network_header_mm_dest | M |
| message_type | TSC_mt_temporary_id_assign_reject | M |
| reject_reason | Reject_reason_rx_base IF_PRESENT | O |
| Detailed Comments : | | |

IV

Dynamic Part

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_OC_07

Group : FT/CC/BV/OC/

Purpose : Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call, using the piece-wise method to transfer dialling information.

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
The CC-SETUP message does not contain a called party number.
The called party number information is saved in TSPX_called_party_number
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1.1, 9.3.1.2, 9.3.1.4, 9.3.1.5, 9.3.1.6, 9.3.1.7 and 9.3.1.8,
ETS 300 370 [12], subclause 6.1.1.1 b, figure 5

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx01) | | 2) |
| 4 | | +STP_initialise_tf(TSC_lt_originated) | | | 3) |
| 5 | B1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_setup_ack_rx_base) | (PASS) | 4) |
| 6 | | START T_P_CC_04 | | | |
| 7 | | +STP_send_called_party_number | | | 5) |
| 8 | B2 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 6) |
| 9 | B3 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 10 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 11 | | +STP_check_u_plane | | | |
| 12 | | +PO_normal_release | | | |
| 13 | B5 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 7) |
| 14 | B6 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 15 | | +STP_check_u_plane | | | |
| 16 | | +PO_normal_release | | | |
| 17 | B7 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 8) |
| 18 | B8 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 19 | | +STP_check_u_plane | | | |
| 20 | | +PO_normal_release | | | |
| 21 | B9 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 9) |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 22 | | +STP_check_u_plane | | | |
| 23 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) Send CC-SETUP, without called party number. 3) Initialise the transaction flag to 'originated' 4) Wait for the CC-SETUP-ACK to arrive. 5) This teststep sends the called party number to the IUT, in successive CC-INFO's, containing a multi-keypad ie with one digit. The actual called party number is specified in the PIXIT. 6) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 7) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 8) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link 9) Wait for CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_OC_08

Group : FT/CC/BV/OC/

Purpose : Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call set-up with en-block dialling in {CC-SETUP} message.

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
The CC-SETUP message contains a called party number.
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1.1, 9.3.1.2, 9.3.1.4, 9.3.1.6, 9.3.1.7 and 9.3.1.8,
ETS 300 370 [12], subclause 6.1.1.1 a, figure 3

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx02) | | 2) |
| 4 | | +STP_initialise_tf(TSC_iut_terminated) | | | 3) |
| 5 | B1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 4) |
| 6 | | START T_P_CC_04 | | | |
| 7 | B2 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 8 | B3 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 9 | | +STP_check_u_plane | | | |
| 10 | | +PO_normal_release | | | |
| 11 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 5) |
| 12 | | START T_P_CC_04 | | | |
| 13 | B5 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 14 | | +STP_check_u_plane | | | |
| 15 | | +PO_normal_release | | | |
| 16 | B6 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 6) |
| 17 | | START T_P_CC_04 | | | |
| 18 | B7 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 19 | | +STP_check_u_plane | | | |
| 20 | | +PO_normal_release | | | |
| 21 | B8 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 7) |
| 22 | | +STP_check_u_plane | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 23 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established.</p> <p>2) Send CC-SETUP with called party number.</p> <p>3) Initialise the transaction flag to 'originated'</p> <p>4) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM). Check U-plane connection and release link.</p> <p>5) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link.</p> <p>6) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> <p>7) Wait for CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_OC_09
Group : FT/CC/BV/OC/
Purpose : Verify that the IUT is able, when it has a subscription record for the requesting PT, to perform a CC-state transition from the F-00 state to F-10 state for an outgoing emergency call set-up with en-block dialling in {CC-SETUP} message.
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: F-00
The CC-SETUP message contains a called party number.
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1
ETS 300 370 [12], subclause 6.1.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx04) | | 2) |
| 4 | | +STP_initialise_tf(TSC_lt_originated) | | | 3) |
| 5 | B1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 4) |
| 6 | | START T_P_CC_04 | | | |
| 7 | B2 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 8 | B3 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 9 | | +STP_check_u_plane | | | |
| 10 | | +PO_normal_release | | | |
| 11 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 5) |
| 12 | | START T_P_CC_04 | | | |
| 13 | B5 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 14 | | +STP_check_u_plane | | | |
| 15 | | +PO_normal_release | | | |
| 16 | B6 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 6) |
| 17 | | START T_P_CC_04 | | | |
| 18 | B7 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 19 | | +STP_check_u_plane | | | |
| 20 | | +PO_normal_release | | | |
| 21 | B8 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 7) |
| 22 | | +STP_check_u_plane | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 23 | | +PO_normal_release | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) Send CC-SETUP with a <<called_party_number>>ie, a portable_id>>ie containing ipui-type and an <<basic_service'>>ie containing emergency call. 3) Initialise the transaction flag to 'originated' 4) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 5) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 6) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link 7) Wait for CC-CONNECT from the MSC(GSM). Check U-plane connection and release link | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_OC_10

Group : FT/CC/BV/OC/

Purpose : Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call, using call set-up with en-bloc dialling in {CC-INFO} message(received in state F-02)

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
The CC-INFO message contains a called party number.
The called party number information is saved in TSPX_called_party_number
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1.1, 9.3.1.2, 9.3.1.4, 9.3.1.5, 9.3.1.6, 9.3.1.7 and 9.3.1.8,
ETS 300 370 [12], subclause 6.1.1.1 b, figure 4

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx01) | | 2) |
| 4 | | +STP_initialise_tf(TSC_lt_originated) | | | 3) |
| 5 | B1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_setup_ack_rx_base) | (PASS) | 4) |
| 6 | | START T_P_CC_04 | | | |
| 7 | | DLS ! DL_DATA_REQ | DI_data_req (Cc_info_tx09) | | 5) |
| 8 | B2 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 6) |
| 9 | B3 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 10 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 11 | | +STP_check_u_plane | | | |
| 12 | | +PO_normal_release | | | |
| 13 | B5 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 7) |
| 14 | B6 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 15 | | +STP_check_u_plane | | | |
| 16 | | +PO_normal_release | | | |
| 17 | B7 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 8) |
| 18 | B8 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 19 | | +STP_check_u_plane | | | |
| 20 | | +PO_normal_release | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|---------------------------------------|-------------------------------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 21 | B9 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 9) |
| 22 | | +STP_check_u_plane | | | |
| 23 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) Send CC-SETUP, without called party number. 3) Initialise the transaction flag to 'originated' 4) Wait for the CC-SETUP-ACK to arrive. 5) Send CC-INFO containing the called party number and the sending_complete ie to the IUT. The actual called party number is specified in the PIXIT. 6) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 7) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link. 8) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link 9) Wait for CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_OC_11
Group : FT/CC/BV/OC/
Purpose : Verify that the IUT is able to perform a CC-state transition from state F-00 to state F-10 for an outgoing normal call, using call set-up with en-bloc dialling in second {CC-INFO} message(received in state F-02)
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: F-00
The first CC-INFO message only contains one digit.
The second CC-INFO message contains a called party number.
The called party number information is saved in TSPX_called_party_number
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1.1, 9.3.1.2, 9.3.1.4, 9.3.1.5, 9.3.1.6, 9.3.1.7 and 9.3.1.8,
ETS 300 370 [12], subclause 6.1.1.1 b

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx01) | | 2) |
| 4 | | +STP_initialise_tf(TSC_It_originated) | | | 3) |
| 5 | B1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_setup_ack_rx_base) | (PASS) | 4) |
| 6 | | START T_P_CC_04 | | | |
| 7 | | DLS ! DL_DATA_REQ | DI_data_req (Cc_info_tx06(TSO_get_one_digit(TSPX_called_party_number, 0))) | | 5) |
| 8 | | DLS ! DL_DATA_REQ | DI_data_req (Cc_info_tx09) | | 6) |
| 9 | B2 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 7) |
| 10 | B3 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 11 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 12 | | +STP_check_u_plane | | | |
| 13 | | +PO_normal_release | | | |
| 14 | B5 | DLS ? DL_DATA_IND | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 8) |
| 15 | B6 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 16 | | +STP_check_u_plane | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|---------------------------------------|--------------------------------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 17 | | +PO_normal_release | | | |
| 18 | B7 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 9) |
| 19 | B8 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 20 | | +STP_check_u_plane | | | |
| 21 | | +PO_normal_release | | | |
| 22 | B9 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 10) |
| 23 | | +STP_check_u_plane | | | |
| 24 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established.</p> <p>2) Send CC-SETUP, without called party number.</p> <p>3) Initialise the transaction flag to 'originated'</p> <p>4) Wait for the CC-SETUP-ACK to arrive.</p> <p>5) Send CC-INFO containing a multi_keypad ie with one digit.</p> <p>6) Send CC-INFO containing the called party number and the sending_complete ie to the IUT. The actual called party number is specified in the PIXIT.</p> <p>7) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM). Check U-plane connection and release link.</p> <p>8) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link.</p> <p>9) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> <p>10) Wait for CC-CONNECT from the MSC(GSM). Check U-plane connection and release link</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_IC_03

Group : FT/CC/BV/IC/

Purpose : Verify that the IUT is able to perform an incoming call via the states F-06 and F-07 to the state F-10.

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
An incoming CC_INFO message is handled within DF_handle_cc_events
ETS 300 175-5 [5], subclause 9.3.2
ETS 300 370 [12], subclause 6.1.1.3, figure 6

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | +STP_release_link | | | |
| 3 | | +STP_invoke_incoming_call_from_GSM | | | 2) |
| 4 | | +STP_handle_indirect_link_est_GSM | | | 3) |
| 5 | | +STP_invoke_mt_call_from_GSM | | | 4) |
| 6 | B1 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_header. transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx06) | (PASS) | 5) |
| 7 | | +STP_initialise_tf(TSC_iut_originate d) | | | |
| 8 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_alerting_tx_base) | | 6) |
| 9 | | START T_P_CC_05 | | | |
| 10 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_connect_tx_base) | | 7) |
| 11 | B2 | DLS ? DL_DATA_IND CANCEL T_P_CC_05 | DI_data_ind(Cc_connect_ack_rx_base) | (PASS) | 8) |
| 12 | | +STP_check_u_plane | | | |
| 13 | | +PO_normal_release | | | |
| 14 | B3 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_header. transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx07) | (PASS) | 9) |
| 15 | | +STP_initialise_tf(TSC_iut_originate d) | | | |
| 16 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_alerting_tx_base) | | 6) |
| 17 | | START T_P_CC_05 | | | |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|---------------------------------------|---|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 18 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_connect_tx_base) | | 7) |
| 19 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_05 | DI_data_ind(Cc_connect_ack_rx_base) | (PASS) | 8) |
| 20 | | +STP_check_u_plane | | | |
| 21 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) A PAGING message from the MSC(GSM) is initiated. 3) An indirect link establishment is processed. 4) An appropriate CC-SETUP message(with or without <<signal>> ie) from the MSC(GSM) is initiated. 5) Wait for the CC-SETUP message without <<signal>>ie. 6) Send CC-ALERTING message 7) Send CC-CONNECT message 8) Wait for the CC-SETUP-ACK message 9) Wait for the CC-SETUP message with <<signal>>ie.</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_IC_04
Group : FT/CC/BV/IC/
Purpose : Verify that the IUT is able to perform an incoming call via state F-06 directly to the state F-10.
Configuration :
Default : DF_handle_cc_timeout,
 DF_handle_cc_events,
 DF_handle_mm_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Initial state: F-00
 Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.
 An incoming CC_INFO message is handled within DF_handle_cc_events
 ETS 300 175-5 [5], subclause 9.3.2
 ETS 300 370 [12], subclause 6.1.1.3, figure 7

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | +STP_release_link | | | |
| 3 | | +STP_invoke_incoming_call_from_GSM | | | 2) |
| 4 | | +STP_handle_indirect_link_est_GSM | | | 3) |
| 5 | | +STP_invoke_mt_call_from_GSM | | | 4) |
| 6 | B1 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_header. transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx06) | (PASS) | 5) |
| 7 | | +STP_initialise_tf(TSC_iut_originate d) | | | |
| 8 | | DLS ! DL_DATA_REQ START T_P_CC_05 | DI_data_req(Cc_connect_tx_base) | | 6) |
| 9 | B2 | DLS ? DL_DATA_IND CANCEL T_P_CC_05 | DI_data_ind(Cc_connect_ack_rx_base) | (PASS) | 7) |
| 10 | | +STP_check_u_plane | | | |
| 11 | | +PO_normal_release | | | |
| 12 | B3 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_header. transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx07) | (PASS) | 8) |
| 13 | | +STP_initialise_tf(TSC_iut_originate d) | | | |
| 14 | | DLS ! DL_DATA_REQ START T_P_CC_05 | DI_data_req(Cc_connect_tx_base) | | 6) |
| 15 | B4 | DLS ? DL_DATA_IND CANCEL T_P_CC_05 | DI_data_ind(Cc_connect_ack_rx_base) | (PASS) | 7) |
| 16 | | +STP_check_u_plane | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 17 | | +PO_normal_release | | | |
| <p>Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) A PAGING message from the MSC(GSM) is initiated. 3) An indirect link establishment is processed. 4) An appropriate CC-SETUP message(with or without <<signal>> ie) from the MSC(GSM) is initiated. 5) Wait for the CC-SETUP message without <<signal>>ie. 6) Send CC-CONNECT message 7) Wait for the CC-SETUP-ACK message 8) Wait for the CC-SETUP message with <<signal>>ie.</p> | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|-----------------|---------|----------|
| <p>Test Case Name : TC_FT_CC_BV_CR_13 Group : FT/CC/BV/CR/ Purpose : Verify that the IUT is able to perform an IUT initiated normal release(invoked by the MSC(GSM)) Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-02 ETS 300 175-5 [5], subclause 9.5.1 ETS 300 370 [12], subclause 6.1.1.5, figure 9 and subclause 6.3.1.2</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | +STP_cc_release_normal_GSM (TSC_iut_originated) | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 7 | | +PO_release_link | | | |
| <p>Detailed Comments : 1) Call initiated by PT 2) Call_Release is required by the IUT 3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_14

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT is able to perform an IUT initiated normal release(invoked by the MSC(GSM))

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-10
ETS 300 175[5], subclause 9.5.1
ETS 300 370 [12], subclause 6.1.1.5, figure 9 and subclause 6.3.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f10 | | | 1) |
| 2 | | +STP_cc_release_normal_GSM (TSC_iut_originated) | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 7 | | +PO_release_link | | | |

Detailed Comments : 1) Call is established by PT
2) Call_Release is required by the FT.
3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and the release the link

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_15 Group : FT/CC/BV/CR/ Purpose : Verify that the IUT is able to perform an IUT initiated normal release(invoked by the MSC(GSM)) Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-07 ETS 300 175-5 [5], subclause 9.5.1 ETS 300 370 [12], subclause 6.1.1.5, figure 9 and subclause 6.3.1.2 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f07 | | | 1) |
| 2 | | +STP_cc_release_normal_GSM (TSC_iut_terminated) | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 7 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is established by the IUT 2) Call Release is required by the IUT 3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and the release the link | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_16

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT, after part of dialling information is sent, is able to perform a PT initiated normal release.

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-02
ETS 300 175-5 [5], subclause 9.5.1
ETS 300 370 [12], subclause 6.1.1.4, figure 8 and subclause 6.3.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | +STP_send_called_party_number | | | 2) |
| 3 | | +STP_cc_release_normal_GSM (TSC_lt_terminated) | | | 3) |
| 4 | | +PO_release_link | | | |
| 5 | | [TCV_release_reason_present = TRUE] | | | |
| 6 | | [TCV_release_reason_code = '12'O] | | | 4) |
| 7 | | +STP_direct_link_establishment | | | |
| 8 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 9 | | +PO_release_link | | | |

Detailed Comments : 1) Call is initiated by PT
2) Send the digits of the called party number in successive CC-INFO messages
3) Call_Release is required by the PT
4) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_17 Group : FT/CC/BV/CR/ Purpose : Verify that the IUT is able to perform a PT initiated normal release. Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-10 ETS 300 175-5 [5], subclause 9.5.1 ETS 300 370 [12], subclause 6.1.1.4, figure 8 and subclause 6.3.1.2 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f10 | | | 1) |
| 2 | | +STP_cc_release_normal_GSM (TSC_it_terminated) | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is established by PT 2) Call_Release is required by the PT 3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_18 Group : FT/CC/BV/CR/ Purpose : Verify that the IUT is able to perform a PT initiated normal release. Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-07 ETS 300 175-5 [5], subclause 9.5.1 ETS 300 370 [12], subclause 6.1.1.4, figure 8 and subclause 6.3.1.2 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f07 | | | 1) |
| 2 | | +STP_cc_release_normal (TSC_lt_terminated) | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is established by the IUT 2) Call_Release is required by the PT. 3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|--|-------|--------------------------|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_19 Group : FT/CC/BV/CR/ Purpose : Verify that the IUT is able to perform a PT initiated abnormal release. Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-07 ETS 300 175-5 [5], subclause 9.5.2 ETS 300 370 [12], subclause 6.1.1.6 a, figure 10 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f07 | | | 1) |
| 2 | | +STP_cc_release_abnormal | | | 2) |
| 3 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is established by IUT 2) Call release is required by the LT. | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|--------------------------|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_20 | | | | | |
| Group : FT/CC/BV/CR/ | | | | | |
| Purpose : Verify that the IUT is able to perform an PT initiated abnormal release. | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-10 ETS 300 175-5 [5], subclause 9.5.2 ETS 300 370 [12], subclause 6.1.1.6 a, figure 10 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f10 | | | 1) |
| 2 | | +STP_cc_release_abnormal | | | 2) |
| 3 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is established by the LT 2) Call release is required by the LT | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|--------------------------|-----------------|---------|----------|
| Test Case Name : TC_FT_CC_BV_CR_21 | | | | | |
| Group : FT/CC/BV/CR/ | | | | | |
| Purpose : Verify that the IUT is able to perform an PT initiated abnormal release. | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-06 ETS 300 175-5 [5], subclause 9.5.1 ETS 300 370 [12], subclause 6.1.1.6 b, figure 11 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f06 | | | 1) |
| 2 | | +STP_cc_release_abnormal | | | 2) |
| 3 | | +PO_release_link | | | |
| Detailed Comments : 1) Call is initiated by the IUT. 2) Call release is initiated by the LT. | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_22

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT is able to perform an IUT initiated abnormal release(invoked by the MSC(GSM) by either a RELEASE or a RELEASE-COMplete message)

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-02
ETS 300 175-5 [5], subclause 9.5.2
ETS 300 370 [12], subclause 6.1.1.7, figure 12 and figure 13 and subclause 6.3.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | +STP_cc_release_abnormal_GSM | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) Call initiated by PT
2) Call_Release is required by the IUT
3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_23

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT is able to perform an IUT initiated abnormal release(invoked by the MSC(GSM) by either a RELEASE or a RELEASE-COMplete message)

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-10
ETS 300 175-5 [5], subclause 9.5.2
ETS 300 370 [12], subclause 6.1.1.7, figure 12 and figure 13 and subclause 6.3.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f10 | | | 1) |
| 2 | | +STP_cc_release_abnormal_GSM | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) Call is established by PT
2) Call_Release is required by the IUT
3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_24

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT is able to perform an IUT initiated abnormal release(invoked by the MSC(GSM) by either a RELEASE or a RELEASE-COMplete message)

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-07
ETS 300 175-5 [5], subclause 9.5.2
ETS 300 370 [12], subclause 6.1.1.7, figure 12 and figure 13 and subclause 6.3.1.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f07 | | | 1) |
| 2 | | +STP_cc_release_abnormal_GSM | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) Call is established by the IUT
2) Call_Release is required by the IUT
3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|-----------------|---------|----------|
| <p>Test Case Name : TC_FT_CC_BV_CR_25</p> <p>Group : FT/CC/BV/CR/</p> <p>Purpose : Verify that the IUT is able to perform an IUT initiated abnormal release(invoked by the MSC(GSM) by an ABORT message) after sending the SETUP message to the MSC(GSM)</p> <p>Configuration :</p> <p>Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events</p> <p>Comments : Initial state: F-02 ETS 300 175-5 [5], subclause 9.5.2 ETS 300 370 [12], subclause 6.1.1.8</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | +STP_send_called_party_number | | | 2) |
| 3 | | +STP_cc_release_abnormal_GSM | | | 3) |
| 4 | | +PO_release_link | | | |
| 5 | | [TCV_release_reason_present = TRUE] | | | |
| 6 | | [TCV_release_reason_code = '12'O] | | | 4) |
| 7 | | +STP_direct_link_establishment | | | |
| 8 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 9 | | +PO_release_link | | | |
| 10 | | [TCV_release_reason_present = FALSE] | | I | 5) |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Call initiated by PT 2) Send the digits of the called party number in successive CC-INFO messages 3) Call_Release is required by the IUT 4) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link 5) An appropriate release reason should be included | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_BV_CR_26

Group : FT/CC/BV/CR/

Purpose : Verify that the IUT is able to perform an IUT initiated abnormal release(invoked by the MSC(GSM) by sending a CM-SERVICE-REJECT message after receipt of a CM-SERVICE-REQUEST message from the IUT)

Configuration :

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-02
ETS 300 175-5 [5], subclause 9.5.2
ETS 300 370 [12], subclause 6.1.2.8

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | +STP_cc_release_abnormal_GSM | | | 2) |
| 3 | | +PO_release_link | | | |
| 4 | | [TCV_release_reason_present = TRUE] | | | |
| 5 | | [TCV_release_reason_code = '12'O] | | | 3) |
| 6 | | +STP_direct_link_establishment | | | |
| 7 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 8 | | +PO_release_link | | | |
| 9 | | [TCV_release_reason_present = FALSE] | | I | 4) |

Detailed Comments : 1) Call initiated by PT
2) Call_Release is required by the IUT
3) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link
4) An appropriate release reason should be included

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_TI_05
Group : FT/CC/TV/
Purpose : Verify that the IUT, after having started timer F-<CC.01>, sends a {CC-RELEASE} message when the timer expires after the defined time. The {CC-RELEASE} message should arrive within the allowed margin time of +- 5%.
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: F-02
ETS 300 175-5 [5], subclause 9.3.1.5
ETS 300 370 [12], subclause 6.1.5.2.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|-------------------------------------|---------|----------|
| 1 | | +PR_goto_f02 | | | 1) |
| 2 | | START T_F_CC_01_min, START T_F_CC_01_max, CANCEL T_P_CC_04 | | | |
| 3 | B1 | ? TIMEOUT T_F_CC_01_min | | (PASS) | 2) |
| 4 | B2 | DLS ? DL_DATA_IND (TCV_pdu_cc_release := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release)) CANCEL T_F_CC_01_max | DI_data_ind(Cc_release_rx_base) | (PASS) | |
| 5 | | [TCV_release_reason_present = TRUE] | | | 3) |
| 6 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_r eason.reason) | | | |
| 7 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 4) |
| 8 | | +STP_delete_elementary_files | | | |
| 9 | | +PO_release_link | | | |
| 10 | | [TCV_release_reason_code = '12'O] | | | 5) |
| 11 | | +STP_direct_link_establishm ent | | | |
| 12 | | +STP_perform_locate_req uest (Locate_request_tx01, Locate_accept_rx02) | | | |
| 13 | | +PO_release_link | | | |
| 14 | B3 | ? TIMEOUT T_F_CC_01_max | | (FAIL) | 6) |
| 15 | | +STP_cc_release_abnormal | | | 7) |
| 16 | | +PO_release_link | | | |

Detailed Comments : 1) Call is initiated by the PT
2) There is no Cc_release expected, before the Timer CC_01 has been expired.

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Test Case Dynamic Behaviour

Detailed Comments : ...

- 3) If the <<release_reason>> ie is included in the CC-RELEASE message, store it
- 4) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA
- 5) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link
- 6) The IUT shall send a Cc_release immediately after expiring of T_F_CC_01. The difference between T_FF_CC_01_min and T_FF_CC_1_max is for the transmission time.
- 7) Abnormal Call_Release is required by the PT.

| Test Case Dynamic Behaviour | | | | | |
|--|-------|--|-------------------------------------|---------|----------|
| Test Case Name : TC_FT_CC_TI_06 | | | | | |
| Group : FT/CC/TV | | | | | |
| Purpose : Verify that the IUT is able to restart the timer F-<CC.01>, on receipt of a {CC-INFO} message. | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-02 ETS 300 175-5 [5], subclause 9.3.1.5 ETS 300 370 [12], subclause 6.1.5.2.2 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f02 | | | |
| 2 | | START T_F_CC_01_half, CANCEL T_P_CC_04 | | | |
| 3 | B1 | ? TIMEOUT T_F_CC_01_half | | (PASS) | 1) |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_info_tx07) | | 2) |
| 5 | | START T_F_CC_01_min, START T_F_CC_01_max | | | |
| 6 | B3 | ? TIMEOUT T_F_CC_01_min | | (PASS) | 3) |
| 7 | B4 | DLS ? DL_DATA_IND (TCV_pdu_cc_release := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release)) CANCEL T_F_CC_01_max | DI_data_ind(Cc_release_rx_base) | (PASS) | |
| 8 | | [TCV_release_reason_present = TRUE] | | | 4) |
| 9 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_reason.reason) | | | |
| 10 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 5) |
| 11 | | +STP_delete_elementary_files | | | |
| 12 | | +PO_release_link | | | |
| 13 | | [TCV_release_reason_code = '12'O] | | | 6) |
| 14 | | +STP_direct_link_establishment | | | |
| 15 | | +STP_perform_locate_request (Locate_request_tx01 , Locate_accept_rx02) | | | |
| 16 | | +PO_release_link | | | |
| 17 | B5 | ? TIMEOUT T_F_CC_01_max | | (FAIL) | 7) |
| 18 | | +STP_cc_release_abnormal | | | 8) |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 19 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Wait 50 % of T_F_CC_01 in the state F_02. 2) Cc_info with <<multi_keypad>>ie containing 4 digits, in order to restart the IUT timer T_F_CC_01. 3) There is no Cc_release expected, before the Timer CC_01 has been expired. 4) If the <<release_reason>> ie is included in the CC-RELEASE message, store it 5) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA 6) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link 7) The IUT shall send a Cc_release immediately after expiring of T_F_CC_01. The difference between T_FF_CC_01_min and T_FF_CC_1_max is for the transmission time. 8) Abnormal Call_Release is required by the PT. | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_CC_TI_07
Group : FT/CC/TV/
Purpose : Verify that the IUT, after having started timer F-<CC.02>, sends a {CC-RELEASE-COM} message when the timer expires after the defined time. The {CC-RELEASE-COM} message should arrive within the allowed margin time of +- 5%.
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: F-19
ETS 300 175-5 [5], subclause 9.5.1
ETS 300 370 [12], subclause 6.1.5.2.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +PR_goto_f19 | | | |
| 2 | | START T_F_CC_02_min, START T_F_CC_02_max | | | |
| 3 | B1 | ? TIMEOUT T_F_CC_02_min | | (PASS) | 1) |
| 4 | B2 | DLS ? DL_DATA_IND (TCV_pdu_cc_release_com := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release_com)) CANCEL T_F_CC_02_max | DI_data_ind(Cc_release_com_rx_base) | (PASS) | |
| 5 | | [TCV_release_reason_present = TRUE] | | | 2) |
| 6 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_r eason.reason) | | | |
| 7 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 3) |
| 8 | | +STP_delete_elementary_files | | | |
| 9 | | +PO_release_link | | | |
| 10 | | [TCV_release_reason_code = '12'O] | | | 4) |
| 11 | | +STP_direct_link_establishm ent | | | |
| 12 | | +STP_perform_locate_req uest (Locate_request_tx01, Locate_accept_rx02) | | | |
| 13 | | +PO_release_link | | | |
| 14 | B3 | ? TIMEOUT T_F_CC_02_max | | (FAIL) | 5) |
| 15 | | +STP_cc_release_abnormal | | | 6) |
| 16 | | +PO_release_link | | | |

Detailed Comments : 1) There is no Cc_release expected, before the Timer CC_02 has been expired.
2) If the <<release_reason>> ie is included in the CC-RELEASE message, store it
3) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT

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Test Case Dynamic Behaviour

Detailed Comments : ...

deletes CKSN, TMSI and LAI from DAM GA

- 4) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link
- 5) The IUT shall send a Cc_release immediately after expiring of T_F_CC_02. The difference between T_FF_CC_02_min and T_FF_CC_2_max is for the transmission time.
- 6) Abnormal Call_Release is required by the PT.

| Test Case Dynamic Behaviour | | | | | |
|--|-------|--|---|---------|----------|
| Test Case Name : TC_FT_CC_TI_08 | | | | | |
| Group : FT/CC/TV | | | | | |
| Purpose : Verify that the IUT, after having started timer F-<CC.03>, sends a {CC-RELEASE-COM} message when the timer expires after the defined time. The {CC-RELEASE-COM} message should arrive within the allowed margin time of +- 5%. | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-06 ETS 300 175-5 [5], subclause 9.3.2 ETS 300 370 [12], subclause 6.1.5.2.2 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f06 | | | |
| 2 | | START T_F_CC_03_min, START T_F_CC_03_max | | | |
| 3 | B1 | ? TIMEOUT T_F_CC_03_min | | (PASS) | 1) |
| 4 | B2 | DLS ? DL_DATA_IND (TCV_pdu_cc_release_com := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release_com)) CANCEL T_F_CC_03_max | DI_data_ind(Cc_release_com_rx_base) | (PASS) | |
| 5 | | [TCV_release_reason_present = TRUE] | | | 2) |
| 6 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_r eason.reason) | | | |
| 7 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 3) |
| 8 | | +STP_delete_elementary_files | | | |
| 9 | | +PO_release_link | | | |
| 10 | | [TCV_release_reason_code = '12'O] | | | 4) |
| 11 | | +STP_direct_link_establishm ent | | | |
| 12 | | +STP_perform_locate_req uest (Locate_request_tx01, Locate_accept_rx02) | | | |
| 13 | | +PO_release_link | | | |
| 14 | B3 | ? TIMEOUT T_F_CC_03_max | | (FAIL) | 5) |
| 15 | | +STP_cc_release_abnormal | | | 6) |
| 16 | | +PO_release_link | | | |
| Detailed Comments : 1) There is no Cc_release_com expected, before the Timer CC_03 has been expired. 2) If the <<release_reason>> ie is included in the CC-RELEASE message, store it 3) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA | | | | | |

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| Test Case Dynamic Behaviour | |
|---|--|
| <p>Detailed Comments : ...</p> <p>4) In case of the value "Unknown identity" in ie <<release_reason>> the PT shall initiate a normal location registration procedure and then release the link</p> <p>5) The IUT shall send a Cc_release immediately after expiring of T_F_CC_03. The difference between T_FF_CC_03_min and T_FF_CC_3_max is for the transmission time.</p> <p>6) Abnormal Call_Release is required by the PT.</p> | |

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| <p>Test Case Name : TC_FT_MM_BV_ID_05</p> <p>Group : FT/MM/BV/ID/</p> <p>Purpose : Verify that when the basic IUT initiated identity request procedure.is invoked by the MSC({IDENTITY-REQUEST} message with IMSI), the IUT is able to perform this procedure correctly.</p> <p>Configuration :</p> <p>Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_any_timeout, DF_handle_unexpected_events</p> <p>Comments : Initial state: Selected in PIXIT ETS 300 175-5 [5], subclause 13.2.1 ETS 300 370 [12], subclause 6.1.2.2 Figure 16 and subclause 6.3.2.2</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_identity_req | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND(TCV_pdu_identy_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identy_request. identity_type.id_group, TCV_id_type := TCV_pdu_identy_request. identity_type.type) CANCEL T_USER_INVOKE | DI_data_ind(Identity_request_rx01) | (PASS) | 2) |
| 4 | | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0000000'B)] | | (PASS) | 3) |
| 5 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx01) | | |
| 6 | | +PO_release_link | | | |
| 7 | | [(TCV_id_group <> '0000'B) OR (TCV_id_type <> '0000000'B)] | | (I) | 4) |
| 8 | | +PO_release_link | | | |
| <p>Detailed Comments : 1) Invoke Identity request message(with IMSI) from MSC. 2) Receive Identy Request message and save the values of the relevant ies. 3) Id_Group: Portable Id AND Id_Type: IPUI Send Identity Reply with <<portable_id>>ie containing ipui. 4) Wrong Identity request message sent.</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_ID_06
Group : FT/MM/BV/ID/
Purpose : Verify that when the basic IUT initiated identity request procedure is invoked by the MSC({IDENTITY-REQUEST} message with IMEI), the IUT is able to perform this procedure correctly.
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Selected in PIXIT
ETS 300 175-5 [5], subclause 13.2.1
ETS 300 370 [12], subclause 6.1.2.2 Figure 16 and subclause 6.3.2.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_identity_req | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND(TCV_pdu_identity_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identity_request. identity_type.id_group, TCV_id_type := TCV_pdu_identity_request. identity_type.type) CANCEL T_USER_INVOKE | DI_data_ind(Identity_request_rx02) | (PASS) | 2) |
| 4 | | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0010000'B)] | | (PASS) | 3) |
| 5 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx02) | | |
| 6 | | +PO_release_link | | | |
| 7 | | [(TCV_id_group <> '0000'B) OR (TCV_id_type <> '0010000'B)] | | (I) | 4) |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) Invoke Identity request message(with IMEI) from MSC.
2) Receive Identity Request message and save the values of the relevant ies.
3) Id_Group: Portable Id AND Id_Type: IPEI
Send Identity Reply with <<portable_id>>ie containing ipui.
4) Wrong Identity request message sent.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_ID_07
Group : FT/MM/BV/ID/
Purpose : Verify that when the basic IUT initiated identity request procedure.is invoked by the MSC({IDENTITY-REQUEST} message with TMSI), the IUT is able to perform this procedure correctly.
Configuration :
Default : DF_handle_cc_timeout,
 DF_handle_cc_events,
 DF_handle_mm_events,
 DF_handle_mm_invokation,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Initial state: Selected in PIXIT
 ETS 300 175-5 [5], subclause 13.2.1
 ETS 300 370 [12], subclause 6.1.2.2 Figure 16 and subclause 6.3.2.2

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_identity_req | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND(TCV_pdu_identity_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identity_request. identity_type.id_group, TCV_id_type := TCV_pdu_identity_request. identity_type.type) CANCEL T_USER_INVOKE | DL_data_ind(Identity_request_rx03) | (PASS) | 2) |
| 4 | | [(TCV_id_group = '0001'B) AND (TCV_id_type = '1110100'B)] | | (PASS) | 3) |
| 5 | | DLS ! DL_DATA_REQ | DL_data_req(Identity_reply_tx08) | | |
| 6 | | +PO_release_link | | | |
| 7 | | [(TCV_id_group <> '0001'B) OR (TCV_id_type <> '1110100'B)] | | (I) | 4) |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) Invoke Identity request message(with TMSI) from MSC.
 2) Receive Identity Request message and save the values of the relevant ies.
 3) Id_Group: Network assigned Id AND Id_Type: TMSI
 Send Identity Reply with <<network_assigned_id>>ie containing tmsi.
 4) Wrong Identity request message sent.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_ID_08
Group : FT/MM/BV/ID/
Purpose : Verify that when the basic IUT initiated temporary identity assign procedure.is invoked by the MSC({TMSI-REALLOCATION-COMMAND} message), the IUT is able to perform this procedure correctly.
Configuration :
Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Selected in PIXIT
ETS 300 175-5 [5], subclause 13.2.12
ETS 300 370 [12], subclause 6.1.2.5 Figure 20 and subclause 6.3.2.5 figure 32

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_temporary_id_assign | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND(TCV_pdu_temp_id_assign := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present (TCV_pdu_temp_id_assign)) CANCEL T_USER_INVOKE | DI_data_ind(Temporary_id_assign_rx_ base) | (PASS) | 2) |
| 4 | | [TCV_port_id_length_tpui = '00'O] | | | 3) |
| 5 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_valu e)) | | | |
| 6 | B2 | [TCV_nw_ass_id_present = TRUE] | | (PASS) | 4) |
| 7 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assi gned_id.value) | | | |
| 8 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_i d_assign_ack_tx_base) | | |
| 9 | | +PO_release_link | | | |
| 10 | B3 | [TCV_nw_ass_id_present = FALSE] | | (I) | 5) |
| 11 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_i d_assign_rej_tx_base) | | |
| 12 | | +PO_release_link | | | |
| 13 | | [TCV_port_id_length_tpui <> '00'O] | | | 6) |
| 14 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id.id_v alue) | | | |
| 15 | B4 | [TCV_nw_ass_id_present = TRUE] | | (PASS) | 4) |
| 16 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assi gned_id.value) | | | |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|---------------------------------|--|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 17 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_ack_tx_base) | | |
| 18 | | +PO_release_link | | | |
| 19 | B5 | [TCV_nw_ass_id_present = FALSE] | | (I) | 5) |
| 20 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_rej_tx_base) | | |
| 21 | | +PO_release_link | | | |
| Detailed Comments : <ol style="list-style-type: none"> 1) Invoke TMSI REALLOCATION COMMAND message from MSC. 2) Receive Temporary Identity Assign message with or without network_assigned_id(including TMSI). 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request. 4) In case of a new TMSI, the received value shall be stored and LT shall send a temporary_id_assign_ack. 5) If the <<network_assign_id>> ie is not included in the received Temporary Identity Assign message, the LT shall send a temporary_id_assign_rej(that's an assumption!) and the test is inconclusive. 6) In case of tpui the received value will be stored. | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_AU_07 Group : FT/MM/BV/AU/ Purpose : Verify that the IUT, after invocation from the MSC, is able to perform the basic operation of the authentication of the PT procedure and request storage of the DCK.(PT has not stored ZAP value and service class information). Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.3.3 ETS 300 370 [12], subclause 6.1.2.1, figure 15 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | +STP_invoke_pt_authentication_by_GSM | | | |
| 3 | B1 | DLS ? DL_DATA_IND (TCV_pdu_auth_request := DL_DATA_IND.message_unit, TSV_cc_ckn_gsm := TCV_pdu_auth_request.auth_type.cipher _key_number, TCV_rand := TCV_pdu_auth_request.rand.field) CANCEL T_USER_INVOKE | DI_data_ind(Auth_request_rx04) | (PASS) | 2) |
| 4 | | (TCV_res_tx := TSO_algos_res_from_gsm(TCV_rand, TSV_uak), TSV_dck_value := TSO_algos_dck_from_gsm(TSC_rand, TSV_uak)) | | | |
| 5 | | DLS ! DL_DATA_REQ(TCV_pdu_auth_reply.res.field := TCV_res_tx, DL_DATA_REQ.message_unit := TCV_pdu_auth_reply) | DI_data_req(Auth_reply_tx01) | | 3) |
| 6 | | START T_GSM_WAIT | | | 4) |
| 7 | B2 | DLS ? DL_DATA_IND CANCEL T_GSM_WAIT | DI_data_ind(Mm_info_sug gest_rx_base) | (I) | 5) |
| 8 | | +STP_delete_elementary_files | | | |
| 9 | | +PO_release_link | | | |
| 10 | B3 | DLS ? DL_RELEASE_IND CANCEL T_GSM_WAIT | DI_rel_ind | (PASS) | 6) |
| 11 | B4 | ? TIMEOUT T_GSM_WAIT | | (I) | 7) |
| 12 | | +PO_release_link | | | |
| Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) Auth_type specifies dck to be stored, zap value not increased. 3) The IUT shall use the saved res for AUTH_REPLY. 4) Start specific timer T_GSM_WAIT to verify successful authentication 5) IUT receives AUTH_REJECT from MSC(mapped to MM_INFO_SUGGEST) and deletes CKSN, | | | | | |

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| Test Case Dynamic Behaviour |
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| Detailed Comments : ... |
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TMSI and LAI from DAM GA.

6) IUT will normally release Link.

7) No proper reaction from IUT

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_AU_08 Group : FT/MM/BV/AU/ Purpose : Verify that the IUT, after successful PT authentication procedure(initiated by the MSC), is able to handle an incoming {AUTHENTICATION-REJECT} message (from the MSC) correctly by sending a {MM-INFO-SUGGEST} message to the PP. Configuration : Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.3.3 ETS 300 370 [12], subclause 6.1.2.1 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | +STP_invoke_pt_authentication_by_GSM | | | |
| 3 | B1 | DLS ? DL_DATA_IND (TCV_pdu_auth_request := DL_DATA_IND.message_unit, TSV_cc_ckn_gsm := TCV_pdu_auth_request.auth_type.cipher _key_number, TCV_rand := TCV_pdu_auth_request.rand.field) CANCEL T_USER_INVOKE | DI_data_ind(Auth_request_rx04) | (PASS) | 2) |
| 4 | | (TCV_res_tx := TSO_algos_res_from_gsm(TCV_rand, TSV_uak), TCV_res_tx_1 := TSO_algos_res_add_1(TCV_res_tx), TSV_dck_value := TSO_algos_dck_from_gsm(TSC_rand, TSV_uak)) | | | |
| 5 | | DLS ! DL_DATA_REQ(TCV_pdu_auth_reply.res.field := TCV_res_tx_1, DL_DATA_REQ.message_unit := TCV_pdu_auth_reply) | DI_data_req(Auth_reply_tx01) | | 3) |
| 6 | | START T_GSM_WAIT | | | 4) |
| 7 | B2 | DLS ? DL_DATA_IND CANCEL T_GSM_WAIT | DI_data_ind(Mm_info_sug gest_rx_base) | (PASS) | 5) |
| 8 | | +STP_delete_elementary_files | | | |
| 9 | | +PO_release_link | | | |
| 10 | B3 | DLS ? DL_RELEASE_IND CANCEL T_GSM_WAIT | DI_rel_ind | (I) | 6) |
| 11 | B4 | ? TIMEOUT T_GSM_WAIT | | (I) | 7) |
| 12 | | +PO_release_link | | | |
| Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established. 2) Auth_type specifies dck to be stored, zap value not increased. 3) The IUT shall use a wrong res(saved res + 1) for AUTH_REPLY. | | | | | |

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Test Case Dynamic Behaviour

Detailed Comments : ...

- 4) Start specific timer T_GSM_WAIT to verify a proper reaction
- 5) IUT receives AUTH_REJECT from MSC(mapped to MM_INFO_SUGGEST) and deletes CKSN, TMSI and LAI from DAM GA.
- 6) IUT releases Link.
- 7) No proper reaction from IUT

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_LO_07 | | | | | |
| Group : FT/MM/BV/LO/ | | | | | |
| Purpose : Verify that the IUT is able to perform the basic operation of the GSM related location registration procedure, requested with an IPUI , when the GSM and the DECT location area changes(broadcast attributes bit a38 was set to 1, and still is 1). | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.4.1 ETS 300 370 [12], subclause 6.1.2.3, figure 17 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx01) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present (TCV_pdu_locate_acc), TSV_extended_location_information := TCV_pdu_locate_acc.location_area.extended_location_information) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (PASS) | 2) |
| 6 | B2 | [TCV_port_id_length_tpui = '00'O] | | (PASS) | 3) |
| 7 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_value)) | | | |
| 8 | | [TCV_nw_ass_id_present = TRUE] | | | 4) |
| 9 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |
| 10 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_i d_assign_ack_tx_base) | | |
| 11 | | +PO_release_link | | | |
| 12 | B3 | [TCV_port_id_length_tpui <> '00'O] | | (PASS) | 5) |
| 13 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id._value) | | | |
| 14 | | [TCV_nw_ass_id_present = TRUE] | | | 4) |
| 15 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|--|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 16 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_ack_tx_base) | | |
| 17 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Send a LOCATE-REQUEST message with ELI not equivalent to LAI from RFP 2) Receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI). A possible interrupting PT authentication is handled in DF_handle_mm_events. Store length of received portable id and value of received ELI(extended location information). 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request 4) In case of a new TMSI, the received value shall be stored and LT shall send a temporary_id_assign_ack 5) In case of tpui the received value will be stored. | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_LO_09 Group : FT/MM/BV/LO/ Purpose : Verify that the IUT is able to perform the attach procedure, requested with an IPUI , when the GSM and the DECT location area don't change(ELI from PP equivalent to the LAI associated to the RFP; broadcast attributes bit a38 was set to 1, and still is 1). Configuration : Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.4.1 ETS 300 370 [12], subclause 6.1.2.3, figure 17 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx01) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present(TCV_pdu_locate_acc), TSV_extended_location_information := TCV_pdu_locate_acc.location_area.extended_location_information) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (PASS) | 2) |
| 6 | B2 | [TCV_port_id_length_tpui = '00'O] | | (PASS) | 3) |
| 7 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_value)) | | | |
| 8 | | [TCV_nw_ass_id_present = TRUE] | | | 4) |
| 9 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |
| 10 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_ack_tx_base) | | |
| 11 | | +PO_release_link | | | |
| 12 | B3 | [TCV_port_id_length_tpui <> '00'O] | | (PASS) | 5) |
| 13 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id._value) | | | |
| 14 | | [TCV_nw_ass_id_present = TRUE] | | | 4) |
| 15 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|--|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 16 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_ack_tx_base) | | |
| 17 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Send a LOCATE-REQUEST message with ELI equivalent to LAI from RFP 2) Receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI). A possible interrupting PT authentication is handled in DF_handle_mm_events. Store length of received portable id and value of received ELI(extended location information). 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request 4) In case of a new TMSI, the received value shall be stored and LT shall send a temporary_id_assign_ack 5) In case of tpui the received value will be stored. | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_LO_10

Group : FT/MM/BV/LO/

Purpose : Verify that the IUT is able to perform after a first attach procedure(no change in GSM and DECT location area) and the following detach procedure the attach procedure again, requested with an IPUI , when the GSM and the DECT location area don't change(ELI from PP equivalent to the LAI associated to the RFP; broadcast attributes bit a38 was set to 1, and still is 1).

Configuration :

Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
ETS 300 175-5 [5], subclause 13.4.1 and 13.4.2
ETS 300 370 [12], subclause 6.1.2.3, figure 17, subclause 6.3.2.3, subclause 6.1.2.4, figure 19 and subclause 6.3.2.4, figure 31

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---------------------------------|---------|----------|
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | B1 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 4 | | +STP_release_link | | | |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | B2 | DLS ! DL_DATA_REQ | DI_data_req(Detach_tx_base) | (PASS) | 2) |
| 7 | | +STP_release_link | | | |
| 8 | | +STP_direct_link_establishment | | | |
| 9 | B3 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 10 | | +PO_release_link | | | |

Detailed Comments : 1) Send a LOCATE-REQUEST message with ELI equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.
2) Send a DETACH message with IMSI(in <<portable_id>> ie) and TMSI(in <<network_assigned_id>> ie)

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_LO_11
Group : FT/MM/BV/LO/
Purpose : Verify that the IUT is able to perform after a first attach procedure(no change in GSM and DECT location area) and the following detach procedure the normal location registration procedure again, requested with an IPUI , when the GSM and the DECT location area changes(ELI from PP not equivalent to the LAI associated to the RFP; broadcast attributes bit a38 was set to 1, and still is 1).
Configuration :
Default : DF_handle_mm_timeout,
 DF_handle_mm_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Initial state: F-00
 ETS 300 175-5 [5], subclause 13.4.1 and 13.4.2
 ETS 300 370 [12], subclause 6.1.2.3, figure 17, subclause 6.3.2.3, subclause 6.1.2.4, figure 19 and subclause 6.3.2.4, figure 31

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---------------------------------|---------|----------|
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | B1 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 4 | | +STP_release_link | | | |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | B2 | DLS ! DL_DATA_REQ | DI_data_req(Detach_tx_base) | (PASS) | 2) |
| 7 | | +STP_release_link | | | |
| 8 | | +STP_direct_link_establishment | | | |
| 9 | B3 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 3) |
| 10 | | +PO_release_link | | | |

Detailed Comments : 1) Send a LOCATE-REQUEST message with ELI equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.
 2) Send a DETACH message with IMSI(in <<portable_id>> ie) and TMSI(in <<network_assigned_id>> ie)
 3) Send a LOCATE-REQUEST message with ELI not equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_LO_12

Group : FT/MM/BV/LO/

Purpose : Verify that the IUT is able to perform after a first attach procedure(no change in GSM and DECT location area) the following periodic location updating procedure, requested with an IPUI , when the GSM and the DECT location area don't change(ELI from PP equivalent to the LAI associated to the RFP; broadcast attributes bit a38 was set to 1, and still is 1).

Configuration :

Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: F-00
ETS 300 175-5 [5], subclause 13.4.1
ETS 300 370 [12], subclause 6.1.2.3, figure 17 and subclause 6.3.2.3

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | B1 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 4 | | +STP_release_link | | | |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | B2 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 7 | | +PO_release_link | | | |

Detailed Comments : 1) Send a LOCATE-REQUEST message with ELI equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_LO_13
Group : FT/MM/BV/LO/
Purpose : Verify that the IUT is able to perform after a first attach procedure(no change in GSM and DECT location area) the following normal location updating procedure, requested with an IPUI , when the GSM and the DECT location area changes(ELI from PP not equivalent to the LAI associated to the RFP; broadcast attributes bit a38 was set to 1, and still is 1).
Configuration :
Default : DF_handle_mm_timeout,
 DF_handle_mm_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Initial state: F-00
 ETS 300 175-5 [5], subclause 13.4.1
 ETS 300 370 [12], subclause 6.1.2.3, figure 17 and subclause 6.3.2.3

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|-----------------|---------|----------|
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | B1 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 1) |
| 4 | | +STP_release_link | | | |
| 5 | | +STP_direct_link_establishment | | | |
| 6 | B2 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | 2) |
| 7 | | +PO_release_link | | | |

Detailed Comments : 1) Send a LOCATE-REQUEST message with ELI equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.
 2) Send a LOCATE-REQUEST message with ELI not equivalent to LAI from RFP, receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI) and store the relevant values.

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_LO_14 | | | | | |
| Group : FT/MM/BV/LO/ | | | | | |
| Purpose : Verify that the IUT sends back a {LOCATE_REJECT} message(containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate IE contents(<<portable id>> containing unknown IPU; broadcast attributes bit a38 was set to 1, and still is 1). | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.4.1 ETS 300 370 [12], subclause 6.1.2.3, figure 18 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx02) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_rej := DL_DATA_IND.message_unit, TCV_reject_reason_code := TCV_pdu_locate_rej.reject_reason.reason) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_reject_rx_base) | (PASS) | 2) |
| 6 | B2 | [(TCV_reject_reason_code = '02'O) OR (TCV_reject_reason_code = '06'O)] | | (PASS) | 3) |
| 7 | | +STP_delete_elementary_files | | | |
| 8 | | +PO_release_link | | | |
| 9 | B3 | [(TCV_reject_reason_code = '76'O)] | | (I) | 4) |
| 10 | | +STP_delete_elementary_files | | | |
| 11 | | +PO_release_link | | | |
| 12 | B4 | [(TCV_reject_reason_code = '80'O)] | | (I) | 5) |
| 13 | | +STP_delete_elementary_files | | | |
| 14 | | DLS ? DL_DATA_IND | DI_data_ind(Mm_info_suggest_rx_base) | | |
| 15 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 16 | | +PO_release_link | | | |
| 17 | B5 | [(TCV_reject_reason_code <>'02'O) AND (TCV_reject_reason_code <> '06'O) AND (TCV_reject_reason_code <>'76'O) AND (TCV_reject_reason_code <> '80'O)] | | (I) | 6) |
| 18 | | +PO_release_link | | | |
| 19 | B6 | DLS ? DL_DATA_IND CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (FAIL) | 7) |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 20 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Send a LOCATE-REQUEST message with a <<portable_id>> ie containing an unknown IPUi 2) Receive the LOCATE-REJECT message from MSC with the <<reject_reason>> ie 3) In case of an appropriate value of the <<reject_reason>> ie the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 4) In case of the value "PLMN not allowed" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 5) In case of the value "Location area not allowed" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA, sends a MM-INFO-SUGGEST message to initiate a normal location registration procedure and then releases the Link 6) In case of any other value of the <<reject_reason>> the IUT only releases the Link 7) In case of a LOCATE-ACCEPT message the test fails | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_LO_15 | | | | | |
| Group : FT/MM/BV/LO/ | | | | | |
| Purpose : Verify that the IUT sends back a {LOCATE_REJECT} message(containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate IE contents(<<location_area>> containing unknown PLMN; broadcast attributes bit a38 was set to 1, and still is 1). | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.4.1 ETS 300 370 [12], subclause 6.1.2.3, figure 18 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx03) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_rej := DL_DATA_IND.message_unit, TCV_reject_reason_code := TCV_pdu_locate_rej.reject_reason.reason) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_reject_rx_base) | (PASS) | 2) |
| 6 | B2 | [(TCV_reject_reason_code = '76'O)] | | (PASS) | 3) |
| 7 | | +STP_delete_elementary_files | | | |
| 8 | | +PO_release_link | | | |
| 9 | B3 | [(TCV_reject_reason_code = '02'O) OR (TCV_reject_reason_code = '06'O)] | | (I) | 4) |
| 10 | | +STP_delete_elementary_files | | | |
| 11 | | +PO_release_link | | | |
| 12 | B4 | [(TCV_reject_reason_code = '80'O)] | | (I) | 5) |
| 13 | | +STP_delete_elementary_files | | | |
| 14 | | DLS ? DL_DATA_IND | DI_data_ind(Mm_info_suggest_rx_base) | | |
| 15 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 16 | | +PO_release_link | | | |
| 17 | B5 | [(TCV_reject_reason_code <>'02'O) AND (TCV_reject_reason_code <> '06'O) AND (TCV_reject_reason_code <>'76'O) AND (TCV_reject_reason_code <> '80'O)] | | (I) | 6) |
| 18 | | +PO_release_link | | | |
| 19 | B6 | DLS ? DL_DATA_IND CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (FAIL) | 7) |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 20 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Send a LOCATE-REQUEST message with a <location_area> ie containing an unknown PLMN 2) Receive the LOCATE-REJECT message from MSC with the <<reject_reason>> ie 3) In case of an appropriate value(i.e. "PLMN not allowed") of the <<reject_reason>> ie the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 4) In case of the values "IPUI unknown" or "IPUI not accepted" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 5) In case of the value "Location area not allowed" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA, sends a MM-INFO-SUGGEST message to initiate a normal location registration procedure and then releases the Link 6) In case of any other value of the <<reject_reason>> the IUT only releases the Link 7) In case of a LOCATE-ACCEPT message the test fails | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Test Case Name : TC_FT_MM_BV_LO_16 | | | | | |
| Group : FT/MM/BV/LO/ | | | | | |
| Purpose : Verify that the IUT sends back a {LOCATE_REJECT} message(containing a reasonable <<reject cause>>), after receiving the equivalent GSM {LOCATION UPDATING REJECT} message as a reaction to a received {LOCATE_REQUEST} message with appropriate IE contents(<<location_area>> containing an unknown LAC; broadcast attributes bit a38 was set to 1, and still is 1). | | | | | |
| Configuration : | | | | | |
| Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-00 ETS 300 175-5 [5], subclause 13.4.1 ETS 300 370 [12], subclause 6.1.2.3, figure 18 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx04) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_rej := DL_DATA_IND.message_unit, TCV_reject_reason_code := TCV_pdu_locate_rej.reject_reason.reason) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_reject_rx_base) | (PASS) | 2) |
| 6 | B2 | [(TCV_reject_reason_code = '80'O)] | | (PASS) | 3) |
| 7 | | +STP_delete_elementary_files | | | |
| 8 | | DLS ? DL_DATA_IND | DI_data_ind(Mm_info_suggest_rx_base) | | |
| 9 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | |
| 10 | | +PO_release_link | | | |
| 11 | B3 | [(TCV_reject_reason_code = '02'O) OR (TCV_reject_reason_code = '06'O)] | | (I) | 4) |
| 12 | | +STP_delete_elementary_files | | | |
| 13 | | +PO_release_link | | | |
| 14 | B4 | [(TCV_reject_reason_code = '76'O)] | | (I) | 5) |
| 15 | | +STP_delete_elementary_files | | | |
| 16 | | +PO_release_link | | | |
| 17 | B5 | [(TCV_reject_reason_code <>'02'O) AND (TCV_reject_reason_code <> '06'O) AND (TCV_reject_reason_code <>'76'O) AND (TCV_reject_reason_code <> '80'O)] | | (I) | 6) |
| 18 | | +PO_release_link | | | |
| 19 | B6 | DLS ? DL_DATA_IND CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (FAIL) | 7) |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 20 | | +PO_release_link | | | |
| <p>Detailed Comments :</p> <ol style="list-style-type: none"> 1) Send a LOCATE-REQUEST message with a <location_area> ie containing an unknown LAC 2) Receive the LOCATE-REJECT message from MSC with the <<reject_reason>> ie 3) In case of an appropriate value(i.e. "Location area not allowed") of the <<reject_reason>> ie the IUT deletes CKSN, TMSI and LAI from DAM GA, sends a MM-INFO-SUGGEST message to initiate a normal location registration procedure and then and releases the Link 4) In case of the values "IPUI unknown" or "IPUI not accepted" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 5) In case of the value "PLMN not allowed" in ie <<reject_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA and releases the Link 6) In case of any other value of the <<reject_reason>> the IUT only releases the Link 7) In case of a LOCATE-ACCEPT message the test fails | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_CH_06

Group : FT/MM/BV/CH/

Purpose : Verify that the IUT, after invocation by the MSC({CIPHER-COMMAND} message with CKN and Kc), is able to perform the basic operation of FT initiated cipher switching procedure requesting "cipher-on", while no ciphering is active.

Configuration :

Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Initial state: Specified in PIXIT
ETS 300 175-5 [5], subclause 13.8
ETS 300 370 [12], subclause 6.1.2.6 Figure 22 and subclause 6.3.2.6

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--------------------------------------|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_cift_ccstate) | | | |
| 2 | | +STP_invoke_ft_init_ciphering_on | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx03) | (PASS) | 2) |
| 4 | | (TSV_dck_value := TSO_algos_dck_from_gsm_kc()) | | | 3) |
| 5 | | DLS ! DL_ENC_KEY_REQ | DI_enc_key_req(TSV_dck _value) | | 4) |
| 6 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_enabled) | | 5) |
| 7 | B2 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_enabled) | (PASS) | 6) |
| 8 | | +PO_release_link | | | |

Detailed Comments : 1) To invoke the FT to initiate ciphering on.
2) Wait for Cipher Request with <<cipher_info>>ie containing ciphering on.
3) Calculate the DCK
4) Pass dck value to DLC.
5) Start ciphering in LT
6) Wait for the DL_ENCRYPT_IND with ciphering status 'enabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_BV_CH_07
Group : FT/MM/BV/CH/
Purpose : Verify that the IUT, after invocation by the MSC({CIPHER-COMMAND} message with CKN and Kc), is able to perform the basic operation of FT initiated cipher switching procedure requesting "cipher-off", while ciphering is active.
Configuration :
Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Specified in PIXIT
ETS 300 175-5 [5], subclause 13.8
ETS 300 370 [12], subclause 6.1.2.6 Figure 22 and subclause 6.3.2.6

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--------------------------------------|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_cift_ccstate) | | | |
| 2 | | +STP_invoke_ft_init_ciphering_on | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx03) | (PASS) | 2) |
| 4 | | (TSV_dck_value := TSO_algos_dck_from_gsm_kc()) | | | 3) |
| 5 | | DLS ! DL_ENC_KEY_REQ | DI_enc_key_req(TSV_dck _value) | | 4) |
| 6 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_enabled) | | 5) |
| 7 | B2 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_enabled) | (PASS) | 6) |
| 8 | | +STP_invoke_ft_init_ciphering_of f | | | 7) |
| 9 | B3 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx04) | (PASS) | 8) |
| 10 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_disabled) | | 9) |
| 11 | B4 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_disabled) | (PASS) | 10) |
| 12 | | +PO_release_link | | | |

Detailed Comments : 1) To invoke the FT to initiate ciphering on.
2) Wait for Cipher Request with <<cipher_info>>ie containing ciphering on.
3) Calculate the DCK
4) Pass dck value to DLC.
5) Start ciphering in LT
6) Wait for the DL_ENCRYPT_IND with ciphering status 'enabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout.
7) To invoke the FT to initiate ciphering off.
8) Wait for Cipher Request with <<cipher_info>>ie containing ciphering off.
9) Start ciphering in LT with encryption_command 'disabled'
10) Wait for the DL_ENCRYPT_IND with ciphering status 'disabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_TI_08
Group : FT/MM/TT/
Purpose : Verify that the IUT, when timer F-<MM_ident.2> expires after the defined time, aborts the procedure, and thus allows the lower priority procedure {LOCATE_REQUEST} to proceed.
Configuration :
Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Specified in PIXIT.
ETS 300 175-5 [5], subclause 13.2.1
ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_identity_req | | | 1) |
| 3 | | DLS ? DL_DATA_IND(TCV_pdu_identy_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identy_request. identity_type.id_group, TCV_id_type := TCV_pdu_identy_request. identity_type.type) CANCEL T_USER_INVOKE, START T_F_MM_ident_2_max | DI_data_ind(Identity_request_rx_base) | (PASS) | 2) |
| 4 | | ? TIMEOUT T_F_MM_ident_2_max | | (PASS) | |
| 5 | | +STP_perform_locate_request(Locate _request_tx01, Locate_accept_rx02) | | | 3) |
| 6 | | +PO_release_link | | | |

Detailed Comments : 1) Invoke Identity request message.
2) Receive Identity Request message and save the values of the relevant ies.
3) Execute successful GSM location registration procedure.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_TI_09
Group : FT/MM/TI/
Purpose : Verify that the IUT, when timer F-<MM_auth.1> expires after the defined time, aborts the procedure, and thus allows the lower priority procedure {LOCATE_REQUEST} to proceed.
Configuration :
Default : DF_handle_mm_timeout,
 DF_handle_mm_events,
 DF_handle_mm_invokation,
 DF_handle_cc_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : ETS 300 175-5 [5], subclause 13.3.1
 ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|------------------------------------|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_aupt_ccstate) | | | 1) |
| 2 | | +STP_invoke_pt_authentication_by_GSM | | | 2) |
| 3 | B1 | DLS ? DL_DATA_IND (TCV_pdu_auth_request := DL_DATA_IND.message_unit, TCV_rand := TCV_pdu_auth_request.rand.field, TCV_rs := TCV_pdu_auth_request.rs.field) CANCEL T_USER_INVOKE | DI_data_ind(Auth_request_rx04) | (PASS) | 3) |
| 4 | | START T_F_MM_auth_1_max | | | |
| 5 | | ? TIMEOUT T_F_MM_auth_1_max | | (PASS) | |
| 6 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | 4) |
| 7 | | +PO_release_link | | | |

Detailed Comments : 1) Goto the state that has been declared in the PIXIT, as initial state for this procedure. A postcondition to this teststep is that a link is established.
 2) Invoke Authentication Request message (from MSC)
 3) Receive Authentication Request message(Authentication on UAK mandated, so UAK has to be present beforehand).
 4) Execute successful GSM location registration procedure.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_TI_10
Group : FT/MM/TT/
Purpose : Verify that the IUT, when timer F-<MM_cipher.1> expires after the defined time, aborts the procedure, and thus allows the lower priority procedure {LOCATE_REQUEST} to proceed.
Configuration :
Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_mm_invokation,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Specified in PIXIT
ETS 300 175-5 [5], subclause 13.8
ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--------------------------------------|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_cift_ccstate) | | | 1) |
| 2 | | +STP_invoke_ft_init_cipherng_off | | | 2) |
| 3 | B1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx03) | (PASS) | 3) |
| 4 | | START T_F_MM_cipher_1_max | | | |
| 5 | | ? TIMEOUT T_F_MM_cipher_1_max | | (PASS) | |
| 6 | | +STP_perform_locate_request(Locate_request_tx01, Locate_accept_rx02) | | | 4) |
| 7 | | +PO_release_link | | | |

Detailed Comments : 1) Select the state appropriate for testing of ft initiated cipherng.
2) Invoke the FT initiated cipherng procedure with cipherng off.
3) Wait for Cipher Request with <<cipher_info>>ie containing cipherng on.
4) Execute successful GSM location registration procedure.

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_TI_11
Group : FT/MM/TTI/
Purpose : Verify that the IUT, when during the GSM location registration procedure with TPUI assignment, the timer F-<MM_ident.1> expires after the defined time, aborts the procedure, and thus allows a new GSM location registration procedure to proceed.
Configuration :
Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: F-00
In order for this testcase to be successfully executed, the IUT should assign a TPUI in the {LOCATE-ACCEPT} message
ETS 300 175-5 [5], subclause subclause 13.2.2
ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--------------------------------------|---------|----------|
| 1 | | +PR_goto_f00_no_link | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | START T_P_MM_locate_1 | | | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Locate_request_tx01) | | 1) |
| 5 | B1 | DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present (TCV_pdu_locate_acc), TSV_extended_location_information := TCV_pdu_locate_acc.location_area.extended_location_information) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx02) | (PASS) | 2) |
| 6 | | [TCV_port_id_length_tpui = '00'0] | | | 3) |
| 7 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_value)) | | | |
| 8 | B2 | [TCV_nw_ass_id_present = FALSE] | | (I) | 4) |
| 9 | | +PO_release_link | | | |
| 10 | | [TCV_nw_ass_id_present = TRUE] | | | 5) |
| 11 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |
| 12 | | START T_F_MM_ident_1_max | | | |
| 13 | B3 | ? TIMEOUT T_F_MM_ident_1_max | | (PASS) | |
| 14 | | +STP_perform_locate_request(Locate_request_tx01, Locate_accept_rx02) | | | 6) |

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| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 15 | | +PO_release_link | | | |
| 16 | | [TCV_port_id_length_tpui <> '00'O] | | | 7) |
| 17 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id.id_value) | | | |
| 18 | B4 | [TCV_nw_ass_id_present = FALSE] | | (I) | 4) |
| 19 | | +PO_release_link | | | |
| 20 | | [TCV_nw_ass_id_present = TRUE] | | | 5) |
| 21 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |
| 22 | | START T_F_MM_ident_1_max | | | |
| 23 | B5 | ? TIMEOUT T_F_MM_ident_1_max | | (PASS) | |
| 24 | | +STP_perform_locate_request(Locate_request_tx01, Locate_accept_rx02) | | | 6) |
| 25 | | +PO_release_link | | | |
| <p>Detailed Comments : 1) Send a LOCATE-REQUEST message with ELI not equivalent to LAI from RFP 2) Receive the LOCATE-ACCEPT message from MSC with or without network_assigned_id(including TMSI). A possible interrupting PT authentication is handled in DF_handle_mm_events. Store length of received portable id and value of received ELI(extended location information). 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request 4) In case of missing <<network_assigned_id>> ie, test result is inconclusive. 5) In case of a new TMSI, the received value shall be stored and LT initiates a new location registration after expiry of the maximal value for timer T_F_MM_ident_1. 6) Result of the test depends on the succeeding of this procedure. 7) In case of tpui the received value will be stored.</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_MM_TI_12
Group : FT/MM/TI/
Purpose : Verify that the IUT, when during the (GSM initiated) temporary identity assign procedure with TPUI assignment, the timer F-<MM_ident.1> expires after the defined time, aborts the procedure, and thus allows a new GSM location registration procedure to proceed.
Configuration :
Default : DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_cc_events,
DF_handle_any_timeout,
DF_handle_unexpected_events
Comments : Initial state: Selected in PIXIT
ETS 300 175-5 [5], subclause 13.2.12
ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--|---------|----------|
| 1 | | +PR_select_state (TSPX_mmproc_idpt_ccstate) | | | |
| 2 | | +STP_invoke_temporary_id_assign | | | 1) |
| 3 | B1 | DLS ? DL_DATA_IND(TCV_pdu_temp_id_assign := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present (TCV_pdu_temp_id_assign)) CANCEL T_USER_INVOKE | DI_data_ind(Temporary_id_assign_rx_ base) | (PASS) | 2) |
| 4 | | [TCV_port_id_length_tpui = '00'O] | | | 3) |
| 5 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_valu e)) | | | |
| 6 | B2 | [TCV_nw_ass_id_present = TRUE] | | (PASS) | 4) |
| 7 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assi gned_id.value) | | | |
| 8 | | START T_F_MM_ident_1_max | | | |
| 9 | B3 | ? TIMEOUT T_F_MM_ident_1_max | | (PASS) | |
| 10 | | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | 5) |
| 11 | | +PO_release_link | | | |
| 12 | B4 | [TCV_nw_ass_id_present = FALSE] | | (I) | 6) |
| 13 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_i d_assign_rej_tx_base) | | |
| 14 | | +PO_release_link | | | |
| 15 | | [TCV_port_id_length_tpui <> '00'O] | | | 7) |
| 16 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id.id_v alue) | | | |
| 17 | B5 | [TCV_nw_ass_id_present = TRUE] | | (PASS) | 4) |

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| Test Case Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 18 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_assigned_id.value) | | | |
| 19 | | START T_F_MM_ident_1_max | | | |
| 20 | B6 | ? TIMEOUT | | (PASS) | |
| 21 | | T_F_MM_ident_1_max +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | | 5) |
| 22 | | +PO_release_link | | | |
| 23 | B7 | [TCV_nw_ass_id_present = FALSE] | | (I) | 6) |
| 24 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_rej_tx_base) | | |
| 25 | | +PO_release_link | | | |
| <p>Detailed Comments : 1) Invoke TMSI REALLOCATION COMMAND message from MSC. 2) Receive Temporary Identity Assign message with or without network_assigned_id(including TMSI). 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request. 4) In case of a new TMSI, the received value shall be stored and LT initiates a new location registration after expiry of the maximal value for timer T_F_MM_ident_1. 5) Result of the test depends on the succeeding of this procedure. 6) If the <<network_assign_id>> ie is not included in the received Temporary Identity Assign message, the LT shall send a temporary_id_assign_rej(that's an assumption!) and the test is inconclusive. 7) In case of tpui the received value will be stored.</p> | | | | | |

| Test Case Dynamic Behaviour | | | | | |
|--|-------|---|-----------------|---------|----------|
| <p>Test Case Name : TC_FT_LC_BV_LE_04 Group : FT/LC/BV/LE/ Purpose : Verify that the IUT is able to initiate the indirect (paged) FT-initiated link establishment procedure after receipt of a {PAGING} message (with IMSI or TMSI) from the MSC. Configuration : Default : DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Initial state: T-00 ETS 300 175-5 [5], subclause 14.2.1 and 14.2.3 ETS 300 370 [12], subclause 6.1.3, figure 26 and subclause 6.3.3, figure 34</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_and_perform_locate_request | | | |
| 2 | | +STP_release_link | | | |
| 3 | | +STP_invoke_incoming_call_from_GSM | | | |
| 4 | | +STP_handle_indirect_link_est_GSM | | | 1) |
| 5 | | +PO_release_link | | | |
| <p>Detailed Comments : 1) An indirect link establishment is processed. Test passes.</p> | | | | | |

Test Case Dynamic Behaviour

Test Case Name : TC_FT_LC_TI_04
Group : FT/LC/TI/
Purpose : Verify that the IUT during indirect link establishment(invoked by the MSC), retransmits the {LCE_PAGE_REQUEST} message after a period of <LCE.03> +- 5%
Configuration :
Default : DF_handle_cc_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Initial state: T-00
 ETS 300 175-5 [5], subclause 14.2.3
 ETS 300 370 [12], subclause 6.1.5.2.1

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | |
| 2 | | +STP_release_link | | | |
| 3 | | +STP_invoke_incoming_call_from_GSM | | | |
| 4 | B1 | DLB? DL_BROADCAST_IND START T_F_LCE_03_min, START T_F_LCE_03_max | DI_brc_ind(Lce_request_page_rx01(TSC_lce_hdr_cc)) | (PASS) | 1) |
| 5 | B2 | DLB ? DL_BROADCAST_IND CANCEL T_F_LCE_03_min, CANCEL T_F_LCE_03_max | DI_brc_ind(Lce_request_page_rx01(TSC_lce_hdr_cc)) | (FAIL) | 2) |
| 6 | | +PO_release_link | | | |
| 7 | | ? TIMEOUT T_F_LCE_03_min | | | |
| 8 | B3 | DLB ? DL_BROADCAST_IND CANCEL T_F_LCE_03_max | DI_brc_ind(Lce_request_page_rx01(TSC_lce_hdr_cc)) | (PASS) | 3) |
| 9 | | +PO_release_link | | | |
| 10 | B4 | ? TIMEOUT T_F_LCE_03_max | | (FAIL) | 4) |
| 11 | | +PO_release_link | | | |

Detailed Comments : 1) LT waits for DL_BROADCAST_IND from IUT. If it arrives, guard timers are started.
 2) If the next broadcast message is received before the minimal timer times out: test fails.
 3) If the next broadcast message is received after the minimal timer: test passes
 4) If the next broadcast message comes too late: test fails.

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--|---------------------------------|---------|----------|
| Test Step Name : PR_goto_f01 | | | | | |
| Group : Preambles/ | | | | | |
| Objective : To bring the IUT in state F-01 (Call Initiated). | | | | | |
| Default : | | | | | |
| Comments : Initial state: F-00 Postcondition: Timer T_P_CC_03 is running | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f00_and_perform_locate_request | | | |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx01) | | |
| 4 | | +STP_initialise_tf(TSC_iut_originated) | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Test Step Name : PR_goto_f02 | | | | | |
| Group : Preambles/ | | | | | |
| Objective : To bring the IUT in state F-02 (Overlap Sending). | | | | | |
| Default : | | | | | |
| Comments : Initial state: F-00 Postcondition: timer T_P_CC_O4 is running. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f01 | | | |
| 2 | PR1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03, START T_P_CC_04 | DI_data_ind (Cc_setup_ack_rx_base) | (PASS) | 1) |
| Detailed Comments : 1) Receive a CC-SETUP-ACK | | | | | |

Test Step Dynamic Behaviour

Test Step Name : PR_goto_f06

Group : Preambles/

Objective : To bring the IUT in state F-06 (Call Present).

Default :

Comments : Initial state: F-00

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|--------------------------------|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | +STP_release_link | | | |
| 3 | | +STP_invoke_incoming_call_from_GSM | | | 2) |
| 4 | | +STP_handle_indirect_link_est_GSM | | | 3) |
| 5 | | +STP_invoke_mt_call_from_GSM | | | 4) |
| 6 | PR1 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_heade r.transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx06) | (PASS) | 5) |
| 7 | | +STP_initialise_tf(TSC_iut_originat ed) | | | |
| 8 | PR2 | DLS ? DL_DATA_IND (TCV_pdu_cc_setup := DL_DATA_IND.message_unit, TCV_cc_tv := TCV_pdu_cc_setup.network_heade r.transaction_value) CANCEL T_USER_INVOKE | DI_data_ind(Cc_setup_rx07) | (PASS) | 6) |
| 9 | | +STP_initialise_tf(TSC_iut_originat ed) | | | |

Detailed Comments :

- 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established.
- 2) A PAGING message from the MSC(GSM) is initiated.
- 3) An indirect link establishment is processed.
- 4) An appropriate CC-SETUP message(with or without <<signal>> ie) from the MSC(GSM) is initiated.
- 5) Wait for the CC-SETUP message without <<signal>>ie.
- 6) Wait for the CC-SETUP message with <<signal>>ie.

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-----------------------|--------------------------------------|---------|----------|
| Test Step Name : PR_goto_f07 Group : Preambles/ Objective : To bring the IUT in state F-07(Call Received). Default : Comments : Initial state: F-00 Postcondition: Timer T_F_CC_01 is running | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f06 | | | |
| 2 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_alerting_tx_base) | | |
| Detailed Comments : | | | | | |

Test Step Dynamic Behaviour

Test Step Name : PR_goto_f10

Group : Preambles/

Objective : To bring the IUT in state F-10(Active) with a PT initiated call establishment.

Default :

Comments : Initial state: F-00

The CC-SETUP message contains a called party number.

Any incoming AUTH_REQUEST or CIPHER_COMMAND messages from the MSC(GSM) are handled within DF_handle_mm_events.

A possible timeout of T_P_CC_04 due to delays at the network (GSM) side (e.g. when performing possible authentication or ciphering procedures) is handled in DF_handle_cc_timeout
ETS 300 175-5 [5], subclauses 9.3.1.1, 9.3.1.2, 9.3.1.4, 9.3.1.6, 9.3.1.7 and 9.3.1.8,
ETS 300 370 [12], subclause 6.1.1.1 a, figure 3

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|--|---------|----------|
| 1 | | +PR_goto_f00_and_perform_locate_request | | | 1) |
| 2 | | START T_P_CC_03 | | | |
| 3 | | DLS ! DL_DATA_REQ (TCV_cc_tv := '000'B) | DI_data_req (Cc_setup_tx02) | | 2) |
| 4 | | +STP_initialise_tf(TSC_iut_terminated) | | | 3) |
| 5 | PR1 | DLS ? DL_DATA_IND CANCEL T_P_CC_03, START T_P_CC_04 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 4) |
| 6 | PR2 | DLS ? DL_DATA_IND | DI_data_ind(Cc_alerting_rx_base) | (PASS) | |
| 7 | PR3 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 8 | | +STP_check_u_plane | | | |
| 9 | PR4 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind (Cc_call_proc_rx_base) | (PASS) | 5) |
| 10 | | START T_P_CC_04 | | | |
| 11 | PR5 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 12 | | +STP_check_u_plane | | | |
| 13 | PR6 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_alerting_rx_base) | (PASS) | 6) |
| 14 | | START T_P_CC_04 | | | |
| 15 | PR7 | DLS ? DL_DATA_IND CANCEL T_P_CC_04 | DI_data_ind(Cc_connect_rx_base) | (PASS) | |
| 16 | | +STP_check_u_plane | | | |
| 17 | PR8 | DLS ? DL_DATA_IND CANCEL T_P_CC_03 | DI_data_ind(Cc_connect_rx_base) | (PASS) | 7) |
| 18 | | +STP_check_u_plane | | | |

Detailed Comments : 1) Goto the state F-00 and perform the location registration procedure. A postcondition to this teststep is that a link is established.
2) Send CC-SETUP with called party number.
3) Initialise the transaction flag to 'originated'
4) Wait for CC-CALL-PROC followed by CC-ALERTING and CC-CONNECT from the MSC(GSM) and check U-plane connection.
5) Wait for CC-CALL-PROC followed by CC-CONNECT from the MSC(GSM) and check U-plane connection.
6) Wait for CC-ALERTING followed by CC-CONNECT from the MSC(GSM) and check U-plane connection.
7) Wait for CC-CONNECT from the MSC(GSM) and check U-plane connection.

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|-------------------------------------|---------|----------|
| Test Step Name : PR_goto_f19 | | | | | |
| Group : Preambles/ | | | | | |
| Objective : To bring the IUT in state F-19 (Release Pending) with a FT initiated call release(invoked by the MSC(GSM)) | | | | | |
| Default : DF_handle_cc_events, DF_handle_mm_events, DF_handle_unexpected_events | | | | | |
| Comments : Initial state: F-00 | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +PR_goto_f02 | | | |
| 2 | | +STP_invoke_normal_release_GSM | | | |
| 3 | PR1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cc_release_rx_base) | (PASS) | |
| Detailed Comments : | | | | | |

Test Step Dynamic Behaviour

Test Step Name : PR_select_state(param : CCSTATE_TYPE)

Group : Preambles/

Objective : To select a certain initial (CC) state to go to, as a preamble to the test of a FT initiated MM procedure.
The input parameter indicates the required CC state for a certain MM procedure that is going to be tested.
If the selected state is F-00, then the teststep initiates link establishment.

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_timeout,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : See also ETS 300 444 [10], subclause 6.9.6, table 9

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|-----------------|---------|---------------------|
| 1 | | [param = 0] | | | |
| 2 | | +PR_goto_f00_and_perform_locate_request | | | |
| 3 | | +STP_direct_link_establishment | | | 1) |
| 4 | | [param = 1] | | | |
| 5 | | +PR_goto_f01 | | | |
| 6 | | [param = 2] | | | |
| 7 | | +PR_goto_f02 | | | |
| 8 | | [param = 6] | | | |
| 9 | | +PR_goto_f06 | | | |
| 10 | | [param = 7] | | | |
| 11 | | +PR_goto_f07 | | | |
| 12 | | [param = 10] | | | |
| 13 | | +PR_goto_f10 | | | |
| 14 | | [param = 19] | | | |
| 15 | | +PR_goto_f19 | | | |
| 16 | | [(param = 3) OR (param = 4) OR (param = 5) OR (param = 8) OR (param = 9) OR ((param > 10) AND (param < 19)) OR (param > 19)] | | (I) | param outside range |
| 17 | | +PO_terminate | | | |

Detailed Comments : 1) Initiate link establishment

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| Test Step Name : PR_goto_f00_and_perform_locate_request | | | | | |
| Group : Preambles/ | | | | | |
| Objective : To place the IUT in a stable state, which is defined as follows: – All identities needed by the PT (LT) to access the IUT are available: Accessrights granted, UAK assigned, TPUI assigned, DCK stored. – CC state F-00 – Direct link established – LT (PT) is locked to the FT (IUT) | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : It is assumed that when the LT locked to the tester, the higher layer broadcast bit A38 is set to 1, thus enabling location registration. The teststep STP_init_broadcast_bits will initialise the relevant broadcast bits and the location area. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +STP_init_broadcast_bits | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | PR1 | +STP_perform_locate_request (Locate_request_tx01, Locate_accept_rx02) | | (PASS) | |
| 4 | | +STP_release_link | | | |
| 5 | | +STP_direct_link_establishment | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--------------------------------|-----------------|---------|----------|
| Test Step Name : PR_goto_f00_no_link | | | | | |
| Group : Preambles/ | | | | | |
| Objective : To place the IUT in a stable state, which is defined as follows: – CC state F-00 – No link established – LT (PT) is locked to the FT (IUT) | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : It is assumed that when the LT locked to the tester, the higher layer broadcast bit A38 is set to 1, thus enabling location registration. The teststep STP_init_broadcast_bits will initialise the relevant broadcast bits and the location area. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +STP_init_broadcast_bits | | | |
| 2 | | +STP_direct_link_establishment | | | |
| 3 | | +STP_release_link | | | |
| Detailed Comments : | | | | | |

Test Step Dynamic Behaviour

Test Step Name : STP_cc_release_abnormal

Group : Teststeps/CC/

Objective : To initiate the abnormal cc release procedure , initiated and the LT side.

Default : DF_handle_cc_timeout,
 DF_handle_cc_events,
 DF_handle_mm_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events

Comments : Postcondition: IUT enters the T-00 state

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|-----------------------|---|---------|----------|
| 1 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | |
| 2 | S1 | DLS ? DL_RELEASE_IND | DI_rel_ind | (PASS) | |

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : STP_cc_release_abnormal_GSM

Group : Teststeps/CC/

Objective : To initiate the cc abnormal release procedure at the IUT side(invoked by the MSC(GSM)).

Default : DF_handle_cc_timeout,
DF_handle_cc_events,
DF_handle_mm_events,
DF_handle_any_timeout,
DF_handle_unexpected_events

Comments : Precondition: No timer is running.
Postcondition: IUT enters the T-00 state The link is not yet released.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | | +STP_invoke_abnormal_release_GSM | | | 1) |
| 2 | S1 | DLS ? DL_DATA_IND(TCV_pdu_cc_release_com := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release_com)) CANCEL T_USER_INVOKE | DI_data_ind(Cc_release_com_rx_base) | (PASS) | 2) |
| 3 | | [TCV_release_reason_present = TRUE] | | | 3) |
| 4 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_rea son.reason) | | | |
| 5 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 4) |
| 6 | | +STP_delete_elementary_files | | | |
| 7 | S2 | DLS ? DL_RELEASE_IND CANCEL T_USER_INVOKE | DI_rel_ind | (I) | 5) |

Detailed Comments : 1) Release is to be initiated by the IUT(e.g. the MSC)
2) Wait for CC-RELEASE-COMPLETE message(mapped RELEASE or RELEASE-COMPLETE message from the MSC(GSM))
3) If the <<release_reason>> ie is included in the CC-RELEASE_COM message, store it
4) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA
5) DL_REL_IND received. Result of the test is Inconclusive

Test Step Dynamic Behaviour

Test Step Name : STP_cc_release_normal(param : TRANS_FLAG)
Group : Teststeps/CC/
Objective : To initiate the cc release procedure at the IUT side or LT side.
 The parameter indicates the side which shall initiate the call release.
Default : DF_handle_cc_timeout,
 DF_handle_cc_events,
 DF_handle_mm_events,
 DF_handle_any_timeout,
 DF_handle_unexpected_events
Comments : Precondition: No timer is running.
 Postcondition: IUT enters the T-00 state The link is not yet released.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---|---------|----------|
| 1 | | [param = TSC_lt_terminated] | | | 1) |
| 2 | | DLS ! DL_DATA_REQ START T_P_CC_02 | DI_data_req(Cc_release_tx_base) | | |
| 3 | S1 | DLS ? DL_DATA_IND CANCEL T_P_CC_02 | DI_data_ind(Cc_release_com_rx_base) | (PASS) | |
| 4 | S2 | DLS ? DL_RELEASE_IND CANCEL T_P_CC_02 | DI_rel_ind | (I) | 2) |
| 5 | | [param = TSC_iut_terminated] | | | 3) |
| 6 | | +STP_invoke_normal_release | | | |
| 7 | S3 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cc_release_rx_base) | (PASS) | |
| 8 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | |
| 9 | S4 | DLS ? DL_RELEASE_IND CANCEL T_USER_INVOKE | DI_rel_ind | (I) | 2) |
| 10 | S5 | [(param <> TSC_lt_terminated) AND (param <> TSC_iut_terminated)] | | (I) | |
| 11 | | +PO_release_link | | | |

Detailed Comments : 1) Release is to be initiated by the IUT
 2) DL_REL_IND received. Result of the test is Inconclusive
 3) Release is to be initiated by the LT

| Test Step Dynamic Behaviour | | | | | |
|---|-------|--|---|---------|----------|
| Test Step Name : STP_cc_release_normal_GSM(param : TRANS_FLAG) | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To initiate the cc release procedure at the IUT side(invoked by the MSC(GSM)) or LT side. The parameter indicates the side which shall initiate the call release. | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_cc_events, DF_handle_mm_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Precondition: No timer is running. Postcondition: IUT enters the T-00 state The link is not yet released. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [param = TSC_lt_terminated] | | | 1) |
| 2 | | DLS ! DL_DATA_REQ START T_P_CC_02 | DI_data_req(Cc_release_tx_base) | | 2) |
| 3 | S1 | DLS ? DL_DATA_IND(TCV_pdu_cc_release_com := DL_DATA_IND.message_unit, TCV_release_reason_present := TSO_rel_reason_present (TCV_pdu_cc_release_com)) CANCEL T_P_CC_02 | DI_data_ind(Cc_release_com_rx_base) | (PASS) | 3) |
| 4 | | [TCV_release_reason_present = TRUE] | | | 4) |
| 5 | | (TCV_release_reason_code := TCV_pdu_cc_release_com.release_r eason.reason) | | | |
| 6 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 5) |
| 7 | | +STP_delete_elementary_files | | | |
| 8 | S2 | DLS ? DL_RELEASE_IND CANCEL T_P_CC_02 | DI_rel_ind | (I) | 6) |
| 9 | | [param = TSC_iut_terminated] | | | 7) |
| 10 | | +STP_invoke_normal_release_GSM | | | 8) |
| 11 | S3 | DLS ? DL_DATA_IND(TCV_pdu_cc_release := DL_DATA_IND.message_unit, TCV_release_reason_code := TCV_pdu_cc_release.release_reason.r eason) CANCEL T_USER_INVOKE | DI_data_ind(Cc_release_rx_base) | (PASS) | 9) |
| 12 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | 10) |
| 13 | | [(TCV_release_reason_code = '08'O) OR (TCV_release_reason_code = '12'O)] | | | 5) |
| 14 | | +STP_delete_elementary_files | | | |
| 15 | S4 | DLS ? DL_RELEASE_IND CANCEL T_USER_INVOKE | DI_rel_ind | (I) | 6) |
| 16 | S5 | [(param <> TSC_lt_terminated) AND (param <> TSC_iut_terminated)] | | (I) | |

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Continued from previous page

| Test Step Dynamic Behaviour | | | | | |
|--|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 17 | | +PO_release_link | | | |
| Detailed Comments : 1) Release is to be initiated by the LT 2) Send CC-RELEASE message 3) Wait for CC-RELEASE-COMPLETE message(mapped DISCONNECT message from the MSC(GSM)) 4) If the <<release_reason>> ie is included in the CC-RELEASE_COM message, store it 5) In case of the value "Unknown identity" or "Invalid identity" in ie <<release_reason>> the IUT deletes CKSN, TMSI and LAI from DAM GA 6) DL_REL_IND received. Result of the test is Inconclusive 7) Release is to be initiated by the IUT(e.g. the MSC) 8) Send a DISCONNECT message from the MSC(GSM) 9) Wait for the CC-RELEASE message 10) Send CC-RELEASE-COM | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|---------------------------------------|-----------------|---------|----------|
| Test Step Name : STP_check_u_plane Group : Teststeps/CC/ Objective : To check if the U-plane between the IUT and LT is in place. Default : Comments : | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | (TCV_result := (TSO_check_u_plane())) | | | |
| 2 | S1 | [TCV_result = TRUE] | | (PASS) | |
| 3 | S2 | [TCV_result = FALSE] | | (FAIL) | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|--------------------------|---|---------|----------|
| Test Step Name : STP_invoke_incoming_call_from_GSM Group : Teststeps/CC/ Objective : To invoke the IUT to initiate a normal incoming call setup, while in state F-00. See PIXIT Question B.9.7 Default : Comments : Postcondition: Timer T_USER_INVOKE is started. It will be cancelled when the link is established. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | <IUT ! DL_BROADCAST_IND> | DI_brc_ind(Lce_request_page_rx01(TSC_lce_hdr_cc)) | | 1) |
| 2 | | START T_USER_INVOKE | | | |
| Detailed Comments : 1) A broadcast message, containing the LCE-REQUEST-PAGE PDU, is expected as a reaction to a PAGING message from the MSC | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------------------------|---------|----------|
| Test Step Name : STP_invoke_mt_call_from_GSM | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To invoke the IUT(initiated by the MSC(GSM)) to send CC-SETUP message while in cc state F-00 See PIXIT Question B.9.? | | | | | |
| Default : | | | | | |
| Comments : A dl_data_indication is to be expected, containing a CC_SETUP message. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | <IUT ! DL_DATA_IND> | DI_data_ind(Cc_setup_rx_base) | | |
| 2 | | START T_USER_INVOKE | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|-----------------------|-------------------------------------|---------|----------|
| Test Step Name : STP_invoke_normal_release | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To invoke the IUT to go on hook, thus initiating a normal release, while in any cc state. See PIXIT Question B.9.9 | | | | | |
| Default : | | | | | |
| Comments : A dl_data_indication is to be expected, containing a CC_RELEASE message. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | <IUT ! DL_DATA_IND> | DI_data_ind(Cc_release_rx_base) | | |
| 2 | | START T_USER_INVOKE | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-------------------------------------|---------|----------|
| Test Step Name : STP_invoke_normal_release_GSM | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To invoke the IUT(initiated by the MSC(GSM) which sends a DISCONNECT message) to go on hook, thus initiating a normal release, while in any cc state. See PIXIT Question B.9.9 | | | | | |
| Default : | | | | | |
| Comments : A dl_data_indication is to be expected, containing a CC_RELEASE message. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | <IUT ! DL_DATA_IND> | DI_data_ind(Cc_release_rx_base) | | |
| 2 | | START T_USER_INVOKE | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|-----------------------|---|---------|----------|
| Test Step Name : STP_invoke_abnormal_release_GSM | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To invoke the IUT(initiated by the MSC(GSM) which sends a RELEASE or RELEASE-COMplete message) to go on hook, thus initiating an abnormal release, while in any cc state. See PIXIT Question B.9.9 | | | | | |
| Default : | | | | | |
| Comments : A dl_data_indication is to be expected, containing a CC_RELEASE_COMPLETE message. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | <IUT ! DL_DATA_IND> | DI_data_ind(Cc_release_com_rx_base) | | |
| 2 | | START T_USER_INVOKE | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|---|---------|-------------------|
| Test Step Name : STP_send_called_party_number | | | | | |
| Group : Teststeps/CC/ | | | | | |
| Objective : To send the called party number present in the PIXIT parameter 'TSPX_called_party_number' to the IUT. The called party number information will be sent in successive CC-INFO PDU's, each containing a multi-keypad ie with one digit. | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : The number of digits in the called party number is indicated by the parameter TSPX_nr_of_digits_in_cpn. The timer F<CC.01> is started at the FT-side after receipt of each {CC-INFO} message from the PT and stopped when a {CC-CALL-PROC}, {CC-ALERTING} or {CC-CONNECTY} message is sent back to the PT. If this timer due to any reasons(e.g. possible delays) expires, the FT itself will release the call ({CC-RELEASE} message with reason "timer expiry") | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | (TCV_count := 0) | | | |
| 2 | | REPEAT LTS_send_one_digit UNTIL [TCV_count = TSPX_nr_of_digits_in_cpn] | | | |
| 3 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_info_tx08) | | Local Tree: 1) |
| 4 | | LTS_send_one_digit DLS ! DL_DATA_REQ (TCV_count := TCV_count + 1) | DI_data_req (Cc_info_tx06(TSO_get_one_digit(TSPX_called_party_number, TCV_count))) | | 2) |
| Detailed Comments : 1) Send CC_INFO with <<sending_complete>> ie to indicate the completion of the sending of the dialling information. 2) Send CC_INFO with <<multi_keypad>> ie, containing one digit | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--|-----------------|---------|----------|
| Test Step Name : STP_delete_elementary_files | | | | | |
| Group : Teststeps/MM/ | | | | | |
| Objective : To delete CKSN, TMSI and LAI in DAM GA | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | (TSV_cc_ckn_gsm := '1111'B, TSV_nw_ass_id_tmsi := '11'B, TSV_extended_location_information := 'FFFF'O) | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| Test Step Name : STP_init_broadcast_bits | | | | | |
| Group : Teststeps/MM/ | | | | | |
| Objective : To set the value of the broadcasted "higher layer capabilities" bits(Standard ciphering supported, location registration supported and SIM services available). | | | | | |
| Default : DF_handle_unexpected_events | | | | | |
| Comments : A call to TSO_init_broadcast_bits is made. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | (TCV_result := TSO_init_broadcast_bits()) | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|-------------------------------|--------------------|---------|----------|
| <p>Test Step Name : STP_invoke_pt_authentication_by_GSM</p> <p>Group : Teststeps/MM/</p> <p>Objective : To invoke the FT initiated PT authentication procedure See PIXIT Question B.9.2 and PIXIT Question B.7.9</p> <p>Default : DF_handle_unexpected_events</p> <p>Comments : The PIXIT parameter TSPX_mmproc_aupt_invoke (See PIXIT Question B.7.9), specifies the way the authentication of PT procedure will be invoked. This can either be in a proprietary manner (value is 0), or by means of a protocol stimulus (value !=0). If the value of this parameter is set to 0, PIXIT Question B.9.2 specifies the way to invoke the procedure (NOT using protocol stimuli). If the value of this parameter is set to any other value, the teststep provides a number of alternative protocol stimuli for invoking the procedure.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [TSPX_mmproc_aupt_invoke = 0] | | | |
| 2 | | <IUT ! DL_DATA_IND> | DI_data_ind(| | 1) |
| 3 | | START T_USER_INVOKE | Auth_request_rx04) | | |
| 4 | | [TSPX_mmproc_aupt_invoke = 1] | | | 2) |
| <p>Detailed Comments : 1) Invoke the authentication of PT procedure in a proprietary way, as specified in the PIXIT. A valid AUTH_REQUEST message has to be sent by the MSC(including a valid cipher_key_number)</p> <p>2) t.b.s</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-------------------------------|----------------------|---------|----------|
| <p>Test Step Name : STP_invoke_ft_init_cipherng_off</p> <p>Group : Teststeps/MM/</p> <p>Objective : To invoke the FT to initiate cipherng off See PIXIT Question B.9.5 and PIXIT Question B.7.11</p> <p>Default : DF_handle_unexpected_events</p> <p>Comments : The PIXIT parameter TSPX_mmproc_cift_invoke (See PIXIT Question B.7.11), specifies the way the FT initiated cipher switching procedure will be invoked. This can either be in a proprietary manner (value is 0), or by means of a protocol stimulus (value !=0). If the value of this parameter is set to 0, PIXIT Question B.9.5 specifies the way to invoke the procedure (NOT using protocol stimuli). In this case a dl_data_ind is expected, containing a CIPHER-REQUEST PDU. If the value of this paramter is set to any other value, the teststep provides a number of alternative protocol stimuli for invoking the</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [TSPX_mmproc_cift_invoke = 0] | | | 1) |
| 2 | | <IUT ! DL_DATA_IND> | DI_data_ind(| | |
| 3 | | START T_USER_INVOKE | Cipher_request_rx04) | | |
| 4 | | [TSPX_mmproc_cift_invoke = 1] | | | 2) |
| <p>Detailed Comments : 1) Invoke the FT initiated cipher switching procedure in a proprietary way, as specified in the PIXIT. A valid CIPHER_COMMAND message has to be sent by the MSC(Cipherng request message with the <<cipher_info>>ie containing cipherng off is expected).</p> <p>2) t.b.s</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-------------------------------|--------------------------------------|---------|----------|
| <p>Test Step Name : STP_invoke_ft_init_cipherng_on</p> <p>Group : Teststeps/MM/</p> <p>Objective : To invoke the FT to initiate cipherng on See PIXIT Question B.9.6 and PIXIT Question B.7.11</p> <p>Default : DF_handle_unexpected_events</p> <p>Comments : The PIXIT parameter TSPX_mmproc_cift_invoke (See PIXIT Question B.7.11), specifies the way the FT initiated cipher switching procedure will be invoked. This can either be in a proprietary manner (value is 0), or by means of a protocol stimulus (value !=0). If the value of this parameter is set to 0, PIXIT Question B.9.6 specifies the way to invoke the procedure (NOT using protocol stimuli). In this case a dl_data_ind is expected, containing a CIPHER-REQUEST PDU. If the value of this parameter is set to any other value, the teststep provides a number of alternative protocol stimuli for invoking the</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [TSPX_mmproc_cift_invoke = 0] | | | 1) |
| 2 | | <IUT ! DL_DATA_IND> | DI_data_ind(Cipher_request_rx03) | | |
| 3 | | START T_USER_INVOKE | | | |
| 4 | | [TSPX_mmproc_cift_invoke = 1] | | | 2) |
| <p>Detailed Comments : 1) Invoke the FT initiated cipher switching procedure in a proprietary way, as specified in the PIXIT. A valid CIPHER_COMMAND message has to be sent by the MSC(Cipherng request message with the <<cipher_info>>ie containing cipherng on is expected). 2) t.b.s</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-------------------------------|---|---------|----------|
| <p>Test Step Name : STP_invoke_identity_req</p> <p>Group : Teststeps/MM/</p> <p>Objective : To invoke the FT to initiate identity request. See PIXIT Question B.9.8 and PIXIT Question B.7.12</p> <p>Default : DF_handle_unexpected_events</p> <p>Comments : The PIXIT parameter TSPX_mmproc_idpt_invoke (See PIXIT Question B.7.12), specifies the way the identification of PT procedure will be invoked. This can either be in a proprietary manner (value is 0), or by means of a protocol stimulus (value !=0). If the value of this parameter is set to 0, PIXIT Question B.9.8 specifies the way to invoke the procedure (NOT using protocol stimuli). If the value of this parameter is set to any other value, the teststep provides a number of alternative protocol stimuli for invoking the procedure.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [TSPX_mmproc_idpt_invoke = 0] | | | 1) |
| 2 | | <IUT ! DL_DATA_IND> | DI_data_ind(Identity_request_rx_base) | | |
| 3 | | START T_USER_INVOKE | | | |
| 4 | | [TSPX_mmproc_idpt_invoke = 1] | | | 2) |
| <p>Detailed Comments : 1) Invoke the identification of PT procedure in a proprietary way, as specified in the PIXIT. A valid IDENTITY_REQUEST message has to be sent by the MSC(including either IMSI, IMEI or TMSI). 2) t.b.s</p> | | | | | |

Test Step Dynamic Behaviour

Test Step Name : STP_invoke_temporary_id_assign

Group : Teststeps/MM/

Objective : To invoke the FT to initiate temporary identity assign
See PIXIT Question B.9.? and PIXIT Question B.7.12

Default : DF_handle_unexpected_events

Comments : The PIXIT parameter TSPX_mmproc_idpt_invoke (See PIXIT Question B.7.12), specifies the way the identification of PT procedure will be invoked. This can either be in a proprietary manner (value is 0), or by means of a protocol stimulus (value !=0).
If the value of this parameter is set to 0, PIXIT Question B.9.8 specifies the way to invoke the procedure (NOT using protocol stimuli).
If the value of this parameter is set to any other value, the teststep provides a number of alternative protocol stimuli for invoking the procedure.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|-------------------------------|---|---------|----------|
| 1 | | [TSPX_mmproc_idpt_invoke = 0] | | | 1) |
| 2 | | <IUT ! DL_DATA_IND> | DI_data_ind(Temporary_id_assign_rx_base) | | |
| 3 | | START T_USER_INVOKE | | | |
| 4 | | [TSPX_mmproc_idpt_invoke = 1] | | | 2) |

Detailed Comments : 1) Invoke the identification of PT procedure in a proprietary way, as specified in the PIXIT. A valid TMSI REALLOCATION COMMAND message has to be sent by the MSC.
2) t.b.s

| Test Step Dynamic Behaviour | | | | | | |
|---|-------|---|--|---------|----------|----|
| Test Step Name : STP_perform_locate_request(param_tx : PDU; param_rx : PDU) | | | | | | |
| Group : Teststeps/MM/ | | | | | | |
| Objective : A general teststep for performing location registration | | | | | | |
| Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | | |
| Comments : param_tx is an input parameter specifying the constraints for the location request. param_rx is an output parameter, specifying the constraint for the location accept. A precondition to this test is that the IUT shall be in state F-00 with established L2-link. See ETS 300 370[12] subclause 6.1.2.3 and 6.3.2.3(also ETS 300 175[5] subclause 13.4.1) | | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments | |
| 1 | S1 | START T_P_MM_locate_1 | | | | |
| 2 | | DLS ! DL_DATA_REQ | DI_data_req(param_tx) | | 1) | |
| 3 | | DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_acc.portable_id.length, TCV_nw_ass_id_present := TSO_nw_ass_id_present (TCV_pdu_locate_acc), TSV_extended_location_information := TCV_pdu_locate_acc.location_area.exte nded_location_information) CANCEL T_P_MM_locate_1 | DI_data_ind(param_rx) | (PASS) | 2) | |
| 4 | | [TCV_port_id_length_tpui = '00'O] | | | | 3) |
| 5 | | (TCV_port_id_value_tpui := TSO_ipui_last_20_bits(TSPX_ipui_val ue)) | | | | |
| 6 | | [TCV_nw_ass_id_present = TRUE] | | | | 4) |
| 7 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_as signed_id.value) | | | | |
| 8 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_ assign_ack_tx_base) | | | |
| 9 | | [TCV_port_id_length_tpui <> '00'O] | | | | 5) |
| 10 | | (TCV_port_id_value_tpui := TCV_pdu_locate_acc.portable_id.id_ value) | | | | |
| 11 | | [TCV_nw_ass_id_present = TRUE] | | | | 4) |
| 12 | | (TSV_nw_ass_id_tmsi := TCV_pdu_locate_acc.network_as signed_id.value) | | | | |
| 13 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_ assign_ack_tx_base) | | | |
| Detailed Comments : 1) Send a location registration message 2) Receive Locate accept message from MSC with or without network_assigned_id(including new TMSI) 3) In case of empty tpui, the value of the stored tpui are the last 20 bits of the ipui sent with locate request 4) In case of a new TMSI, the received value shall be stored and LT shall send a | | | | | | |

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| Test Step Dynamic Behaviour | |
|--|--|
| Detailed Comments : ... temporary_id_assign_ack 5) In case of tpui the received value will be stored. | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|---|-------------------|---------|----------|
| Test Step Name : STP_direct_link_establishment Group : Teststeps/LC/ Objective : To establish a link, initiated by the PT, using the direct link establishment procedure as described in ETS 300 444, subclause 8.33 Default : DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events Comments : Precondition: Timer T_DLC_RESPONSE is started. Its timeout is handled in DF_handle_any_timeout. The variable TCV_result indicates success or failure. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | DLS ! DL_ESTABLISH_REQ START T_DLC_RESPONSE | DI_est_req_no_pdu | | |
| 2 | S1 | DLS ? DL_ESTABLISH_CFM (TCV_result := TRUE) CANCEL T_DLC_RESPONSE | DI_est_cfm | (PASS) | |
| 3 | S2 | DLS ? DL_RELEASE_IND (TCV_result := FALSE) CANCEL T_DLC_RESPONSE | DI_rel_ind | (FAIL) | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--|---|---------|----------|
| Test Step Name : STP_handle_indirect_link_est_GSM | | | | | |
| Group : Teststeps/LC/ | | | | | |
| Objective : To handle the indirect link establishment, initiated by the IUT(invoked by MSC) | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Precondition: Timer T_USER_INVOKE is started. After the link establishment, the timer is cancelled. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | S1 | DLB ? DL_BROADCAST_IND | DI_brc_ind(Lce_request_page_rx01(TSC_lce_hdr_cc)) | (PASS) | 1) |
| 2 | | DLS ! DL_ESTABLISH_REQ CANCEL T_USER_INVOKE | DI_est_req_pdu(Lce_page_response_tx03) | | 2) |
| Detailed Comments : 1) A broadcast message is received, with an LCE-REQUEST-PAGE PDU. 2) An LCE_PAGE_RESPONSE containing <<portable_id>>, <<network_assigned_id>> and <<cipher_info>> is sent back to the IUT, and the link is considered to be established. | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|------------------------------|-----------------|---------|----------|
| Test Step Name : STP_initialise_tf(param : TRANS_FLAG) | | | | | |
| Group : Teststeps/LC/ | | | | | |
| Objective : To initialise the transaction flag used in the network header of the CC messages | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | [param = TSC_iut_originated] | | | |
| 2 | | (TCV_cc_iut_tf := '0'B) | | | |
| 3 | | (TCV_cc_lt_tf := '1'B) | | | |
| 4 | | [param = TSC_lt_originated] | | | |
| 5 | | (TCV_cc_iut_tf := '1'B) | | | |
| 6 | | (TCV_cc_lt_tf := '0'B) | | | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|-------------------------------|---------|----------|
| <p>Test Step Name : STP_release_link</p> <p>Group : Teststeps/LC/</p> <p>Objective : To initiate the link release procedure. A DL_RELEASE_REQ is sent, and the DL_RELEASE_CFM is waited for.</p> <p>Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events</p> <p>Comments : It could happen that no link is present whe this teststep is called. Timeout of timer T_LCE_01 is handled in DF_handle_any_timeout, which is attached through the testcase.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_normal) | | |
| 2 | S1 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | (PASS) | |
| 3 | S2 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | (PASS) | 1) |
| <p>Detailed Comments : 1) This receive statement captures release collision.</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|-----------------|---------|----------|
| <p>Test Step Name : PO_normal_release</p> <p>Group : Postambles/</p> <p>Objective : To perform a normal release, initiated by the LT, and to release the link. A final verdict is assigned.</p> <p>Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events</p> <p>Comments : Expiry of timer T_F_CC_02 is handled in default DF_handle_cc_timeout Before terminating the testcase, time T_RELEASE_DELAY seconds is waited, in order to catch any strange behaviour of the IUT, and act upon it.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | START T_RELEASE_DELAY | | | |
| 2 | PO1 | ? TIMEOUT T_RELEASE_DELAY | | (PASS) | |
| 3 | | +STP_cc_release_normal (TSC_lt_originated) | | | |
| 4 | | +STP_release_link | | | |
| 5 | PO2 | CANCEL | | R | |
| <p>Detailed Comments :</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|---------------------------|-----------------|---------|----------|
| Test Step Name : PO_release_link | | | | | |
| Group : Postambles/ | | | | | |
| Objective : To perform a link release procedure, initiated by the LT. A final verdict is assigned. | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Before terminating the testcase and releasing the link, a time T_RELEASE_DELAY seconds is waited, in order to catch any strange behaviour of the IUT, and act upon it. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | START T_RELEASE_DELAY | | | |
| 2 | PO1 | ? TIMEOUT T_RELEASE_DELAY | | (PASS) | |
| 3 | | +STP_release_link | | | |
| 4 | PO2 | CANCEL | | R | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|---------------------------|-----------------|---------|----------|
| Test Step Name : PO_terminate | | | | | |
| Group : Postambles/ | | | | | |
| Objective : To terminate the testcase, in case no link is present. A final verdict is assigned. | | | | | |
| Default : DF_handle_cc_timeout, DF_handle_mm_timeout, DF_handle_mm_events, DF_handle_mm_invokation, DF_handle_cc_events, DF_handle_any_timeout, DF_handle_unexpected_events | | | | | |
| Comments : Before terminating the testcase, time T_RELEASE_DELAY seconds is waited, in order to catch any strange behaviour of the IUT, and act upon it. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | START T_RELEASE_DELAY | | | |
| 2 | PO1 | ? TIMEOUT T_RELEASE_DELAY | | (PASS) | |
| 3 | PO2 | CANCEL | | R | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|-----------------------|---|---------|----------|
| Test Step Name : DFSTP_cc_release_abnormal | | | | | |
| Group : Steps_for_defaults/ | | | | | |
| Objective : To perform an abnormal release, initiated by the LT | | | | | |
| Default : | | | | | |
| Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | |
| 2 | DS1 | DLS ? DL_RELEASE_IND | DI_rel_ind | (PASS) | |
| 3 | DS2 | DLS ? OTHERWISE | | (FAIL) | |
| 4 | | +DFSTP_release_link | | | |
| 5 | DS3 | CANCEL | | R | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|--|---|---------|----------|
| Test Step Name : DFSTP_cc_release_normal | | | | | |
| Group : Steps_for_defaults/ | | | | | |
| Objective : To perform a normal release, initiated by the LT | | | | | |
| Default : | | | | | |
| Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | DLS ! DL_DATA_REQ START T_P_CC_02 | DI_data_req(Cc_release_tx_base) | | |
| 2 | DS1 | DLS ? DL_DATA_IND CANCEL T_P_CC_02 | DI_data_ind(Cc_release_com_rx_base) | (PASS) | |
| 3 | | +DFSTP_release_link | | | |
| 4 | DS2 | DLS ? DL_RELEASE_IND CANCEL T_P_CC_02 | DI_rel_ind | (PASS) | |
| 5 | DS3 | ? TIMEOUT T_P_CC_02 | | (I) | |
| 6 | | +DFSTP_cc_release_abnormal | | | |
| 7 | DS4 | DLS ? OTHERWISE | | (FAIL) | |
| 8 | | +DFSTP_release_link | | | |
| 9 | DS5 | CANCEL | | R | |
| Detailed Comments : | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--|--------------------------------------|---------|----------|
| Test Step Name : DFSTP_handle_ft_init_ciphering_off | | | | | |
| Group : Steps_for_defaults/ | | | | | |
| Objective : To handle an FT initiated request(invoked by the MSC(GSM)) to switch off ciphering. The CIPHER-REQUEST PDU is received, and a cipher request is issued, specifying 'ciphering-off'. | | | | | |
| Default : | | | | | |
| Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | DS1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx04) | (PASS) | 1) |
| 2 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_disabled) | | 2) |
| 3 | DS2 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_disabled) | (PASS) | 3) |
| Detailed Comments : 1) Recieve the Cipher Request with <<cipher_info>>ie containing ciphering on. 2) Start ciphering in LT with encryption command 'disabled' 3) Wait for the DL_ENCRYPT_IND with ciphering status 'disabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout. | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|--------------------------------------|---------|----------|
| Test Step Name : DFSTP_handle_ft_init_ciphering_on | | | | | |
| Group : Steps_for_defaults/ | | | | | |
| Objective : To handle an FT initiated request(invoked by the MSC(GSM)) to switch on ciphering. The CIPHER-REQUEST PDU is received, and a cipher request is issued, specifying 'ciphering-on'. | | | | | |
| Default : | | | | | |
| Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions. | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | DS1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx03) | (PASS) | 1) |
| 2 | | (TSV_dck_value := TSO_algos_dck_from_gsm_kc()) | | | 2) |
| 3 | | DLS ! DL_ENC_KEY_REQ | DI_enc_key_req(TSV_dck_value) | | 3) |
| 4 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_enabled) | | 4) |
| 5 | DS2 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_enabled) | (PASS) | 5) |
| Detailed Comments : 1) Recieve the Cipher Request with <<cipher_info>>ie containing ciphering on. 2) Calculate the DCK 3) Pass dck value to DLC. 4) Start ciphering in LT 5) Wait for the DL_ENCRYPT_IND with ciphering status 'enabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout. | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|--|---|---------|----------|
| <p>Test Step Name : DFSTP_handle_identity_request</p> <p>Group : Steps_for_defaults/</p> <p>Objective : To handle an intervening identity request issued by the IUT.</p> <p>Default :</p> <p>Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions. This teststep supports only following identities: Id_Group: Portable Id AND Id_Type: IPUI Id_Group: Portable Id AND Id_Type: IPEI Id_Group: Portable Id AND Id_Type: TPUI Id_Group: Fixed Id AND Id_Type: ARI Id_Group: Fixed Id AND Id_Type: ARI Id_Group: Fixed Id AND Id_Type: PARK Other combinations are to be implemented, if they are needed.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | DS1 | DLS ? DL_DATA_IND(TCV_pdu_identity_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identity_request. identity_type.id_group, TCV_id_type := TCV_pdu_identity_request.identity_type.type) | DI_data_ind(Identity_request_rx_base) | (PASS) | |
| 2 | DS2 | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0000000'B)] | | (PASS) | 1) |
| 3 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx01) | | |
| 4 | DS3 | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0010000'B)] | | (PASS) | 2) |
| 5 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx02) | | |
| 6 | DS4 | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0100000'B)] | | (PASS) | 3) |
| 7 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx03) | | |
| 8 | DS5 | [(TCV_id_group = '0001'B) AND (TCV_id_type = '1110100'B)] | | (I) | 4) |
| 9 | | +DFSTP_release_link | | | |
| 10 | DS6 | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0000000'B)] | | (PASS) | 5) |
| 11 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx05) | | |
| 12 | DS7 | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0000001'B)] | | (PASS) | 6) |
| 13 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx06) | | |
| 14 | DS8 | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0100000'B)] | | (PASS) | 7) |
| 15 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx04) | | |
| 16 | DS9 | DLS ? OTHERWISE | | (FAIL) | 8) |
| 17 | | CANCEL | | R | |

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| Test Step Dynamic Behaviour | |
|---|--|
| <p>Detailed Comments : 1) Id_Group: Portable Id AND Id_Type: IPUI Send Identity Reply with <<portable_id>>ie containing ipui. 2) Id_Group: Portable Id AND Id_Type: IPEI Send Identity Reply with <<portable_id>>ie containing ipei. 3) Id_Group: Portable Id AND Id_Type: TPUI Send Identity Reply with <<portable_id>>ie containing tpui 4) Id_Group: Network Assigned Id AND Id_Type: GSM TMSI Not implemented. 5) Id_Group: Fixed Id AND Id_Type: ARI Send Identity Reply with <<fixed_id>>ie containing ari. 6) Id_Group: Fixed Id AND Id_Type: ARI + Radio fixed part nr. Send Identity Reply with <<fixed_id>>ie containing ari. 7) Id_Group: Fixed Id AND Id_Type: PARK Send Identity Reply with <<fixed_id>>ie containing park. 8) A general otherwise captures illegal behaviour</p> | |

| Test Step Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| <p>Test Step Name : DFSTP_handle_location_accept Group : Steps_for_defaults/ Objective : To handle an intervening locate update request issued by the IUT. Default : Comments : To handle an locate accept message sent by the FT.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | DS1 | DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_req.portable_id.length) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx01) | (PASS) | |
| 2 | DS2 | [TCV_port_id_length_tpui = '00'O] | | (PASS) | |
| 3 | DS3 | [TCV_port_id_length_tpui <> '00'O] | | (PASS) | |
| 4 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_assign_ack_tx_base) | | |
| <p>Detailed Comments :</p> | | | | | |

| Test Step Dynamic Behaviour | | | | | |
|--|-------|--|---------------------------------------|---------|----------|
| <p>Test Step Name : DFSTP_handle_location_update Group : Steps_for_defaults/ Objective : To handle an intervening locate update request issued by the IUT. Default : Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions.</p> | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | DS1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Mm_info_suggest_rx_base) | (PASS) | 1) |
| <p>Detailed Comments : 1) The locate update is only received. No action is taken, as we are probably in the middle of another procedure anyway.</p> | | | | | |

Test Step Dynamic Behaviour

Test Step Name : DFSTP_handle_pt_authentication

Group : Steps_for_defaults/

Objective : To handle an intervening PT authenticate request issued by the IUT(invoked by the MSC(GSM))

Default :

Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|------------------------------------|---------|----------|
| 1 | DS1 | DLS ? DL_DATA_IND (TCV_pdu_auth_request := DL_DATA_IND.message_unit, TSV_cc_ckn_gsm := TCV_pdu_auth_request.auth_type.cipher_k ey_number, TCV_rand := TCV_pdu_auth_request.rand.field) CANCEL T_USER_INVOKE | DI_data_ind(Auth_request_rx04) | (PASS) | 1) |
| 2 | | (TCV_res_tx := TSO_algos_res_from_gsm(TCV_rand, TSV_uak), TSV_dck_value := TSO_algos_dck_from_gsm(TSC_rand, TSV_uak)) | | | |
| 3 | | DLS ! DL_DATA_REQ(TCV_pdu_auth_reply.res.field := TCV_res_tx, DL_DATA_REQ.message_unit := TCV_pdu_auth_reply) | DI_data_req(Auth_reply_tx01) | | 2) |

Detailed Comments : 1) Auth_request_rx04 specifies authentication based on the UAK and auth_type includes CKN and specifies dck to be stored, zap value not increased.
2) The IUT shall use the saved res for AUTH_REPLY.

Test Step Dynamic Behaviour

Test Step Name : DFSTP_release_link

Group : Steps_for_defaults/

Objective : To initiate link procedure. A DL_RELEASE_REQ is sent (release mode 'abnormal'), and the DL_RELEASE_CFM is waited for.

Default :

Comments : As this teststep is called from the default teststeps, no defaults may be attached to this teststep, in order to prevent recursive definitions.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---------------------------------|---------|----------|
| 1 | | DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_abnormal) | | |
| 2 | DS1 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | (PASS) | |
| 3 | DS2 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | (PASS) | 1) |
| 4 | DS3 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 5 | DS4 | DLS ? OTHERWISE | | (FAIL) | 2) |
| 6 | DS5 | CANCEL | | R | |

Detailed Comments : 1) This receive statement captures release collision.
2) A general otherwise captures invalid behaviour

Default Dynamic Behaviour

Default Name : DF_handle_any_timeout

Group :

Objective : To handle a timeout of any of the timers started in a testcase, and FAIL the testcase

Comments :

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|--|---|---------|----------|
| 1 | D1 | ? TIMEOUT T_USER_INVOKE | | (FAIL) | |
| 2 | | +DFLTS_cc_release_abnormal | | | |
| 3 | D2 | CANCEL | | R | |
| 4 | D3 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 5 | | +DFLTS_release_link | | | |
| 6 | D4 | CANCEL | | R | |
| 7 | D5 | ? TIMEOUT T_CIPHER_SWITCH | | (FAIL) | |
| 8 | | +DFLTS_release_link | | | |
| 9 | D6 | CANCEL | | R | |
| 10 | D7 | ? TIMEOUT T_DLC_RESPONSE | | (FAIL) | |
| 11 | D8 | CANCEL | | R | |
| 12 | D9 | ? TIMEOUT | | (FAIL) | 1) |
| 13 | | +DFLTS_cc_release_abnormal | | | |
| 14 | D10 | CANCEL | | R | |
| 15 | | DFLTS_cc_release_abnormal DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | |
| 16 | DS11 | DLS ? DL_RELEASE_IND | DI_rel_ind | | |
| 17 | DS12 | DLS ? OTHERWISE | | (FAIL) | |
| 18 | | +DFLTS_release_link | | | |
| 19 | DS13 | CANCEL | | R | |
| 20 | | DFLTS_release_link DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_abnormal) | | |
| 21 | DS14 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | | |
| 22 | DS15 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | | 2) |
| 23 | DS16 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 24 | DS17 | DLS ? OTHERWISE | | (FAIL) | 3) |
| 25 | DS18 | CANCEL | | R | |

Detailed Comments : 1) Catch all timeouts
 2) This receive statement captures release collision.
 3) A general otherwise captures invalid behaviour

| Default Dynamic Behaviour | | | | | |
|---|-------|-----------------------|----------------------------------|---------|----------|
| Default Name : DF_handle_cc_events | | | | | |
| Group : | | | | | |
| Objective : To handle any other cc event, and to return to the testcase. | | | | | |
| Comments : | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | D1 | DLS ? DL_DATA_IND | DI_data_ind(Cc_info_rx_base) | (PASS) | 1) |
| 2 | | RETURN | | | |
| Detailed Comments : 1) Handle CC_INFO, and return to the testcase | | | | | |

| Default Dynamic Behaviour | | | | | |
|---|-------|---|---|---------|--|
| Default Name : DF_handle_cc_timeout | | | | | |
| Group : | | | | | |
| Objective : To handle a timeout of any of the CC timers started in a testcase, and fail the testcase | | | | | |
| Comments : | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | D1 | ? TIMEOUT T_P_CC_01 | | (FAIL) | |
| 2 | | +DFLTS_cc_release_normal | | | |
| 3 | D2 | CANCEL | | R | |
| 4 | D3 | ? TIMEOUT T_P_CC_02 | | (FAIL) | |
| 5 | | +DFLTS_cc_release_abnormal | | | |
| 6 | D4 | CANCEL | | R | |
| 7 | D5 | ? TIMEOUT T_P_CC_03 | | (FAIL) | |
| 8 | | +DFLTS_cc_release_abnormal | | | |
| 9 | D6 | CANCEL | | R | |
| 10 | D7 | ? TIMEOUT T_P_CC_04 | | (I) | Implementation of this timer is optional |
| 11 | | DLS ? DL_DATA_IND | DI_data_ind(Cc_notify_rx01) | | 1) |
| 12 | D8 | RETURN | | R | |
| 13 | | DFLTS_cc_release_normal | | | |
| 14 | DS9 | DLS ! DL_DATA_REQ START T_P_CC_02 | DI_data_req(Cc_release_tx_base) | | |
| 15 | | DLS ? DL_DATA_IND CANCEL T_P_CC_02 | DI_data_ind(Cc_release_com_rx_base) | | |
| 16 | DS10 | +DFLTS_release_link | | | |
| 17 | DS11 | DLS ? DL_RELEASE_IND CANCEL T_P_CC_02 | DI_rel_ind | | |
| 18 | | ? TIMEOUT T_P_CC_02 | | (I) | |
| 19 | DS12 | +DFLTS_cc_release_abnormal | | | |
| 20 | | DLS ? OTHERWISE | | (FAIL) | |
| 21 | DS13 | +DFLTS_release_link | | | |
| 22 | | CANCEL | | R | |
| 23 | | DFLTS_cc_release_abnormal | | | |
| 24 | DS14 | DLS ! DL_DATA_REQ | DI_data_req(Cc_release_com_tx_base) | | |
| 25 | DS15 | DLS ? DL_RELEASE_IND | DI_rel_ind | | |
| 26 | DS16 | DLS ? OTHERWISE | | (FAIL) | |
| 27 | | +DFLTS_release_link | | | |
| 28 | DS17 | CANCEL | | R | |
| 29 | | DFLTS_release_link | | | |
| 30 | DS18 | DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_abnormal) | | |
| 31 | DS19 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | | |
| 32 | DS20 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | | 2) |

Continued on next page

Continued from previous page

| Default Dynamic Behaviour | | | | | |
|---|-------|-----------------------|-----------------|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 30 | DS19 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 31 | DS20 | DLS ? OTHERWISE | | (FAIL) | 3) |
| 32 | DS21 | CANCEL | | R | |
| Detailed Comments : 1) A CC_NOTIFY message, to restart the timer is expected from LLME 2) This receive statement captures release collision. 3) A general otherwise captures invalid behaviour | | | | | |

| Default Dynamic Behaviour | | | | | |
|---|-------|--|---|---------|----------|
| Default Name : DF_handle_mm_events | | | | | |
| Group : | | | | | |
| Objective : To handle intervening MM procedures, during CC or MM testcases | | | | | |
| Comments : The procedure is handled, and afterwards control is passed back to the testcase | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +DFLTS_handle_ft_init_cipherring_on | | | |
| 2 | | RETURN | | | |
| 3 | | +DFLTS_handle_ft_init_cipherring_off | | | |
| 4 | | RETURN | | | |
| 5 | | +DFLTS_handle_identity_request | | | |
| 6 | | RETURN | | | |
| 7 | | +DFLTS_handle_location_update | | | |
| 8 | | RETURN | | | |
| 9 | | +DFLTS_handle_pt_authentication | | | |
| 10 | | RETURN | | | |
| | | DFLTS_handle_ft_init_cipherring_on | | | |
| 11 | DS1 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx03) | | 1) |
| 12 | | (TSV_dck_value := TSO_algos_dck_from_gsm_kc()) | | | 2) |
| 13 | | DLS ! DL_ENC_KEY_REQ | DI_enc_key_req(TSV_dck_value) | | 3) |
| 14 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_enabled) | | 4) |
| 15 | DS2 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_enabled) | | 5) |
| | | DFLTS_handle_ft_init_cipherring_off | | | |
| 16 | DS3 | DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Cipher_request_rx04) | | 6) |
| 17 | | DLS ! DL_ENCRYPT_REQ START T_CIPHER_SWITCH | DI_enc_req(TSC_cs_disabled) | | 7) |
| 18 | DS4 | DLS ? DL_ENCRYPT_IND CANCEL T_CIPHER_SWITCH | DI_enc_ind(TSC_cs_disabled) | | 8) |
| | | DFLTS_handle_identity_request | | | |
| 19 | DS5 | DLS ? DL_DATA_IND(TCV_pdu_identy_request := DL_DATA_IND.message_unit, TCV_id_group := TCV_pdu_identy_request. identity_type.id_group, TCV_id_type := TCV_pdu_identy_request.identity_type.type) | DI_data_ind(Identity_request_rx_base) | | |
| 20 | | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0000000'B)] | | | 9) |
| 21 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx01) | | |
| 22 | | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0010000'B)] | | | 10) |
| 23 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx02) | | |

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Continued from previous page

| Default Dynamic Behaviour | | | | | |
|--|-------|---|--|---------|----------|
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 24 | | [(TCV_id_group = '0000'B) AND (TCV_id_type = '0100000'B)] | | | 11) |
| 25 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx03) | | |
| 26 | | [(TCV_id_group = '0001'B) AND (TCV_id_type = '1110100'B)] | | | 12) |
| 27 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx08) | | |
| 28 | | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0000000'B)] | | | 13) |
| 29 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx05) | | |
| 30 | | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0000001'B)] | | | 14) |
| 31 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx06) | | |
| 32 | | [(TCV_id_group = '0100'B) AND (TCV_id_type = '0100000'B)] | | | 15) |
| 33 | | DLS ! DL_DATA_REQ | DI_data_req(Identity_reply_tx04) | | |
| 34 | DS6 | DFLTS_handle_location_update DLS ? DL_DATA_IND CANCEL T_USER_INVOKE | DI_data_ind(Mm_info_suggest_rx_base) | | 16) |
| 35 | DS7 | DFLTS_handle_pt_authentication DLS ? DL_DATA_IND (TCV_pdu_auth_request := DL_DATA_IND.message_unit, TSV_cc_ckn_gsm := TCV_pdu_auth_request.auth_type.cipher_k ey_number, TCV_rand := TCV_pdu_auth_request.rand.field) CANCEL T_USER_INVOKE | DI_data_ind(Auth_request_rx04) | | 17) |
| 36 | | (TCV_res_tx := TSO_algos_res_from_gsm(TCV_rand, TSV_uak), TSV_dck_value := TSO_algos_dck_from_gsm(TSC_rand, TSV_uak)) | | | |
| 37 | | DLS ! DL_DATA_REQ(TCV_pdu_auth_reply.res.field := TCV_res_tx, DL_DATA_REQ.message_unit := TCV_pdu_auth_reply) | DI_data_req(Auth_reply_tx01) | | 18) |
| <p>Detailed Comments : 1) Recieve the Cipher Request with <<cipher_info>>ie containing ciphering on. 2) Calculate the DCK 3) Pass dck value to DLC. 4) Start ciphering in LT 5) Wait for the DL_ENCRYPT_IND with ciphering status 'enabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout. 6) Recieve the Cipher Request with <<cipher_info>>ie containing ciphering on. 7) Start ciphering in LT with encryption command 'disabled'</p> | | | | | |

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Continued from previous page

| Default Dynamic Behaviour | |
|----------------------------------|---|
| Detailed Comments : ... | |
| 8) | Wait for the DL_ENCRYPT_IND with ciphering status 'disabled', and then cancel the timer. The expiry of the timer is handled in DF_handle_mm_timeout. |
| 9) | Id_Group: Portable Id AND Id_Type: IPU! Send Identity Reply with <<portable_id>>ie containing ipui. |
| 10) | Id_Group: Portable Id AND Id_Type: IPE! Send Identity Reply with <<portable_id>>ie containing ipei. |
| 11) | Id_Group: Portable Id AND Id_Type: TPUI Send Identity Reply with <<portable_id>>ie containing tpui |
| 12) | Id_Group: Network Assigned Id AND Id_Type: GSM TMSI Send Identity Reply with <<network_assigned_id>>ie containing tmsi |
| 13) | Id_Group: Fixed Id AND Id_Type: ARI Send Identity Reply with <<fixed_id>>ie containing ari. |
| 14) | Id_Group: Fixed Id AND Id_Type: ARI + Radio fixed part nr. Send Identity Reply with <<fixed_id>>ie containing ari. |
| 15) | Id_Group: Fixed Id AND Id_Type: PARK Send Identity Reply with <<fixed_id>>ie containing park |
| 16) | The locate update is only received. No action is taken, as we are probably in the middle of another procedure anyway. |
| 17) | Auth_request_rx04 specifies authentication based on the UAK and auth_type includes CKN and specifies dck to be stored, zap value not increased. |
| 18) | The IUT shall use the saved res for AUTH_REPLY. |

| Default Dynamic Behaviour | | | | | |
|---|-------|---|--|---------|----------|
| Default Name : DF_handle_mm_invokation | | | | | |
| Group : | | | | | |
| Objective : To handle the reply of a LT (PT) initiated MM procedure used for invoking an FT (IUT) initiated procedure. | | | | | |
| Comments : The procedure is handled, and afterwards control is passed back to the testcase | | | | | |
| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
| 1 | | +DFLTS_handle_location_accept | | | |
| 2 | | RETURN | | | |
| 3 | DS1 | DFLTS_handle_location_accept DLS ? DL_DATA_IND(TCV_pdu_locate_acc := DL_DATA_IND.message_unit, TCV_port_id_length_tpui := TCV_pdu_locate_req.portable_id.length) CANCEL T_P_MM_locate_1 | DI_data_ind(Locate_accept_rx01) | | |
| 4 | DS2 | [TCV_port_id_length_tpui = '00'O] | | | |
| 5 | DS3 | [TCV_port_id_length_tpui <> '00'O] | | | |
| 6 | | DLS ! DL_DATA_REQ | DI_data_req(Temporary_id_ assign_ack_tx_base) | | |
| Detailed Comments : | | | | | |

Default Dynamic Behaviour

Default Name : DF_handle_mm_timeout

Group :

Objective : To handle a timeout of any of the MM timers started in a testcase, and fail the testcase

Comments :

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---------------------------------|---------|----------|
| 1 | D1 | ? TIMEOUT T_P_MM_auth_1 | | (FAIL) | |
| 2 | | +DFLTS_release_link | | | |
| 3 | D2 | CANCEL | | R | |
| 4 | D3 | ? TIMEOUT T_P_MM_cipher_2 | | (FAIL) | |
| 5 | | +DFLTS_release_link | | | |
| 6 | D4 | CANCEL | | R | |
| 7 | D5 | ? TIMEOUT T_P_MM_locate_1 | | (FAIL) | |
| 8 | | +DFLTS_release_link | | | |
| 9 | D6 | CANCEL | | R | |
| | | DFLTS_release_link | | | |
| 10 | | DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_abnormal) | | |
| 11 | DS7 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | | |
| 12 | DS8 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | | 1) |
| 13 | DS9 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 14 | DS10 | DLS ? OTHERWISE | | (FAIL) | 2) |
| 15 | DS11 | CANCEL | | R | |

Detailed Comments : 1) This receive statement captures release collision.
2) A general otherwise captures invalid behaviour

Default Dynamic Behaviour

Default Name : DF_handle_unexpected_events

Group :

Objective : To release the link and to FAIL the testase in case of an unexpected event

Comments : In case a release indication arrives, the result of the test is inconclusive.

| Nr | Label | Behaviour Description | Constraints Ref | Verdict | Comments |
|----|-------|---|---------------------------------|---------|----------|
| 1 | D1 | DLS ? DL_RELEASE_IND | DI_rel_ind | I | 1) |
| 2 | D2 | CANCEL | | R | |
| 3 | D3 | DLS ? OTHERWISE | | (FAIL) | 2) |
| 4 | | +DFLTS_release_link | | | |
| 5 | D4 | CANCEL | | R | |
| 6 | D5 | DLB ? OTHERWISE | | (FAIL) | 2) |
| 7 | | +DFLTS_release_link | | | |
| 8 | D6 | CANCEL | | R | |
| | | DFLTS_release_link | | | |
| 9 | | DLS ! DL_RELEASE_REQ START T_P_LCE_01 | DI_rel_req(TSC_rm_abnormal) | | |
| 10 | DS7 | DLS ? DL_RELEASE_CFM CANCEL T_P_LCE_01 | DI_rel_cfm | | |
| 11 | DS8 | DLS ? DL_RELEASE_IND CANCEL T_P_LCE_01 | DI_rel_ind | | 4) |
| 12 | DS9 | ? TIMEOUT T_P_LCE_01 | | (FAIL) | |
| 13 | DS10 | DLS ? OTHERWISE | | (FAIL) | 5) |
| 14 | DS11 | CANCEL | | R | |

Detailed Comments :

- 1) Unexpected link release: result is inconclusive. Check external conditions
- 2) General otherwise statement, cathcing all unexpected (and thus invalid) events from DLS PCO
- 3) General otherwise statement, cathcing all unexpected (and thus invalid) events from DLB PCO
- 4) This receive statement captures release collision.
- 5) A general otherwise captures invalid behaviour

Annex B (normative): Profile Implementation Extra Information for Testing (IXIT) proforma

Notwithstanding the provisions of the copyright clause related to the text of this ETS, ETSI grants that users of this ETS may freely reproduce the Profile IXIT proforma in this annex so that it can be used for its intended purposes and may further publish the completed Profile IXIT.

This international The Profile IXIT proforma is based on ISO/IEC 9646-6 [13]. Any additional information needed can be found in standard document.

B.1 General

This annex specifies restrictions on answers, and additional questions to (and is intended to be used with) the IXIT proforma specified in DE/RES-03026 Part 9 [6] or ETSI DE/RES-03040-3 [8].

B.2 Profile XRL NWK layer protocol

This subclause specifies restrictions on answers relevant to DECT/GSM IWP PTS, NWK layer. If a question exists in the relevant DECT CI or GAP IXIT but is not listed in the tables of this subclause this means that such a question do not need modifications and is fully applicable for DECT/GSM IWP.

B.2.1 Addresses

Table B.1: Addresses

| No. | SAP addresses | |
|-------------------------|---------------|-------|
| | To IUT | To TS |
| | | |
| Comments: No changes | | |

B.2.2 Parameter values**Table B.2: Parameter values**

| No. | Parameter name | Parameter value | Profile ICS clause | Parameter range | Parameter value | Comment |
|------------------------------------|---|-----------------|--------------------|-----------------|-----------------|---|
| 1 | TSPX_extended_location_information_unknown_lac | | | OCT_7 | | Value of ELI to be used (ELI includes MCC, MNC, LAC and CI) with unknown LAC |
| 2 | TSPX_extended_location_information_unknown_plmn | | | OCT_7 | | Value of ELI to be used (ELI includes MCC, MNC, LAC and CI) with unknown PLMN (wrong MNC) |
| Detailed comments: see also B.3 | | | | | | |

B.2.3 Timer values**Table B.3: Timer values**

| No. | Timer Name Type | Profile ICS clause | Timer range | Timer value | Comment |
|----------------------------------|-----------------|--------------------|-------------|-------------|---------|
| | | | | | |
| Detailed comments: No changes | | | | | |

B.2.4 Counters values**Table B.4: Counter values**

| No. | Counter Name Type | Profile ICS clause | Counter range | Counter value | Comment |
|----------------------------------|-------------------|--------------------|---------------|---------------|---------|
| | | | | | |
| Detailed comments: No changes | | | | | |

B.2.5 Protocol constants values**Table B.5: Protocol constants values**

| No. | Constant name | Profile ICS clause | Constant value | Comment |
|----------------------------------|---------------|--------------------|----------------|---------|
| | | | | |
| Detailed comments: No changes | | | | |

B.2.6 Control of Protocol Data Units (PDU) sending

This subclause identifies requirements for testing, placed by the PTS specification which may not be realisable by the SUT resulting in abstract test cases which cannot be executed (e.g. unsatisfiable implicit send events).

No restrictions or modifications required.

B.3 Profile specific IXIT NWK layer

This subclause contains additional to the DECT/GSM IWP Profile IXIT questions information for testing related to the profile covering requirements of the DECT/GSM IWP Profile specific test specification (PSTS).

Table B.6

| No. | Parameter name | Parameter value | Profile ICS clause | Parameter range | Parameter value | Comment |
|--------------------|---|-----------------|--------------------|-----------------|-----------------|--|
| 1 | TSPX_extended_location_information_unknown_lac | | | OCT_7 | | Value of ELI to be used (ELI includes MCC, MNC, LAC and CI) with unknown LAC |
| 2 | TSPX_extended_location_information_unknown_plmn | | | OCT_7 | | Value of ELI to be used (ELI includes MCC, MNC, LAC and CI) with unknown PLMN(wrong MNC) |
| Detailed comments: | | | | | | |

B.3.5 Configuration constraints

This subclause includes constraints on the configuration of the IUT to restrict its operation to the DECT/GSM IWP only.

No constraints on the configuration of the IUT required.

Annex C (normative): Profile Conformance Test Report (Profile CTR) proforma

Notwithstanding the provisions of the copyright Clause related to the text of this ETS, ETSI grants that users of this ETS may freely reproduce the Profile CTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed Profile CTR.

C.1 Identification summary

C.1.1 Profile CTR

| | |
|-------------------------|--|
| PCTR number | |
| PCTR date | |
| Test laboratory | |
| Accreditation status | |
| Accreditation reference | |
| Technical authority | |
| Job title | |
| Signature | |
| Test laboratory manager | |
| Signature | |

C.1.2 Implementation Under Test (IUT)

| | |
|------------------------|---------------|
| Name | |
| Version | |
| Protocol specification | ETS 300 370 |
| Profile ICS | ETS 300 704-2 |

C.1.3 Testing environment

| | |
|-------------------------------------|---------------|
| Profile IXIT | ETS 300 702-3 |
| Profile specific test specification | ETS 300 702-3 |
| ATM | Remote |
| MOT | |
| Period of testing | |
| Conformance log reference | |
| Retention date of log reference | |

C.1.4 Limits and reservations

The order of test cases listed in clause C.6 (if any) of this Annex corresponds to the ordering of test cases defined in the PSTS referenced in subclause B.1.3. This does not indicate that the test cases were executed in this order.

The test results presented in this test report apply only to the particular IUT declared in subclause C.1.2, as presented for test in the period declared in subclauses C.1.3, and configured as declared in the relevant IXIT attached to this PCTR. This report shall not be reproduced except in full together with its attached ICS and IXIT.

NOTE: Additional information relevant to the technical contents or further use of the test report, or to the rights and obligations of the test laboratory and the client, may be given here. Such information may include restrictions on the publication of the report.

C.1.5 Comments

Additional comments may be given by either the client or test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

| | |
|---|--|
| Additional comments reference in annex: | |
|---|--|

C.2 IUT conformance status

| | |
|---|--------|
| IUT conformance status | Yes/No |
| The IUT conformance to the referenced base specification. | |

NOTE: Further details see ISO 9646-5 [12], annex B clause 2.

C.3 Static conformance summary

| Static conformance summary | Yes/No |
|---|--------|
| The ICS for this IUT consistency with the static conformance requirements in the referenced base specification. | |

NOTE: Further details see ISO 9646-5 [12], annex B clause 3.

C.4 Dynamic conformance summary

| Dynamic conformance summary | Yes/No |
|--|--------|
| Errors in the IUT revealed by the test campaign. | |

NOTE: Further details see ISO 9646-5 [12], annex B clause 4.

C.6 Test campaign report

The following table lists the untestable test cases (if any).

NOTE: For further details see ISO 9646-5 [12], annex B clause 6.

C.6.1 NWK layer

| TC Name | Selected [Yes/No] | Run [Yes/No] | Verdict [P/F/I] | Observation |
|---------|-------------------|--------------|-----------------|-------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

C.7 Observations

NOTE: Additional information relevant to the technical content of the PCTR may be given here.

Annex D (normative): System Conformance Test Report (SCTR) proforma

Notwithstanding the provisions of the copyright Clause related to the text of this ETS, ETSI grants that users of this ETS may freely reproduce the SCTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed SCTR.

D.1 Identification summary

D.1.1 SCTR

| | |
|-------------------------|--|
| SCTR number | |
| SCTR date | |
| Test laboratory manager | |
| Signature | |

D.1.2 Test laboratory

| | |
|------------------|--|
| Identification | |
| Address | |
| Postal code/city | |
| Country | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-mail | |

D.1.3 Client

| | |
|------------------|--|
| Identification | |
| Address | |
| Postal code/city | |
| Country | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-mail | |

D.1.4 System Under Test (SUT)

| | |
|-----------------------------|--|
| Name | |
| Version | |
| Supplier | |
| Dates of testing | |
| Date of receipt of SUT | |
| Location of SUT for testing | |
| SCS identifier | |

D.1.5 Profile

| | |
|------------------------|---------------------------|
| Profile identification | DECT/GSM IWP; ETS 300 370 |
| Profile version | |
| Profile ICS | DE/RES-03044-2 |
| Profile specific IXIT | ETSI DE/RES-03025-3 |
| PTS-summary | ETSI DE/RES-03025-1 |
| PSTS | ETSI DE/RES-03025-3 |

D.1.6 Nature of conformance testing

The purpose of conformance testing is to increase the probability that different implementations can interwork in different environments. However, the complexity of OSI protocols makes exhaustive testing impractical on both technical and economic grounds. Furthermore, there is no guarantee that an SUT which has passed all the relevant test cases conforms to a specification. Neither is there any guarantee that such an SUT will interwork with other real open systems. Rather, the passing of the test cases gives confidence that the SUT has the stated capabilities and that its behaviour conforms consistently in representative instances of communication.

D.1.7 Limits and reservations

The test results presented in this test report apply only to the particular SUT and component IUTs declared in subclause D.1.4 and D.1.8, for the functionality described in the referenced SCS and in the ICS referenced in each PCTR, as presented for test in the period declared in section C.1.4 and configured as declared in the relevant IXIT referenced in each PCTR. This SCTR may not be reproduced except in full together with its SCS.

NOTE: Additional information relevant to the technical contents or further use of the test report, or to the rights and obligations of the test laboratory and the client, may be given here. Such information may include restrictions on the publication of the report.

D.1.8 Record of agreement

A definition of what parts of the SUT were considered to be the IUT during testing, and of the abstract test method and abstract test suite that were used:

| IUT Definition Reference | Protocol | ATM | ATS |
|--------------------------|-------------------|-------------------|---------------|
| | DECT NWK layer FT | Remote | ETS 300 702-3 |
| | DECT DLC layer FT | Remote | ETS 300 494-3 |
| | DECT MAC layer FT | Remote (modified) | ETS 300 494-3 |
| | DECT PHL layer FT | Not applicable | ETS 300 494-3 |

D.1.9 Comments

| | |
|---|--|
| Additional comments reference in annex: | |
|---|--|

NOTE: Additional comments may be given by either the client or test laboratory on any of the contents of the SCTR, for example, to note disagreement between the two parties.

D.2 System report summary**D.2.1 Profile testing summary for DECT/GSM IWP NWK layer FT**

| | |
|---|---|
| Accreditation status | |
| Accreditation reference | |
| Implementation identifier | |
| IUT definition reference | |
| Protocol specification | ETS 300 370 ETS 300 175-5 ETS 300 444 |
| Profile ICS | ETS 300 704-2 |
| Profile IXIT | ETS 300 702-3 |
| PCTR number | |
| PCTR date | |
| PSTS | ETS 300 702-3 |
| ATM | Remote |
| Means of testing identifier | |
| Conformance status | |
| Conformance status Static conformance errors Dynamic conformance errors | Yes / No Yes / No |
| Test cases all | |
| Selected | |
| Run | |
| Passed | |
| Inconclusive | |
| Failed | |
| Observations | |

NOTE: If the SUT is not statically and dynamically conforming for this protocol, an additional summary may be given on aspect of non conformance. Any difficulties encountered may be reported here.

Annex E (normative): System Conformance Statement (SCS) proforma

Notwithstanding the provisions of the copyright Clause related to the text of this ETS, ETSI grants that users of this ETS may freely reproduce the SCS proforma in this annex so that it can be used for its intended purposes and may further publish the completed SCS.

E.1 Identification summary

E.1.1 SCS identification

| | |
|-------------------|--|
| SCS serial number | |
| SCS date | |

E.1.2 IUT identification

| | |
|---------------|--|
| Trade name | |
| Type | |
| Version | |
| Serial number | |

E.1.3 Client identification

| | |
|---------------------|--|
| Company | |
| Street number | |
| Postal code / city | |
| Country | |
| Contact person name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-mail | |

E.1.4 Supplier identification

| | |
|---------------------|--|
| Company | |
| Street number | |
| Postal code / city | |
| Country | |
| Contact person name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-mail | |

E.1.5 Manufacturer identification

(if different from client)

| | |
|---------------------|--|
| Company | |
| Street number | |
| Postal code / city | |
| Country | |
| Contact person name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-mail | |

E.1.6 Protocols identification

| Protocol Name | Specification Reference | PICS Reference | PCTR Reference | PCTR Reference from previous campaign |
|----------------------|--------------------------------|-----------------------|-----------------------|--|
| DECT NWK layer | ETS 300 175 - 5 | ETS 300 476-4 | - | |
| DECT DLC layer | ETS 300 175 - 4 | ETS 300 476-5 | - | |
| DECT MAC layer | ETS 300 175 - 3 | ETS 300 476-6 | - | |
| DECT PHL layer | ETS 300 175 - 2 | ETS 300 476-7 | - | |

E.1.7 Profile identification

| Profile Identifier | Specification Reference | Profile ICS Specific Reference | SCTR Reference | SCTR reference from previous campaign |
|------------------------------|--------------------------------|---------------------------------------|-----------------------|--|
| Generic Access Profile (GAP) | ETS 300 444 | ETS 300 474-2 | ETS 300 494-3 | |

| Profile Identifier | Specification Reference | Profile ICS Specific Reference | SCTR Reference | SCTR reference from previous campaign |
|---------------------------|--------------------------------|---------------------------------------|-----------------------|--|
| DECT/GSM IWP | ETS 300 370 | ETS 300 704-2 | ETS 300 702-3 | |

E.2 Miscellaneous system information

E.2.1 Configuration

| Environment | Which one |
|-----------------------|-----------|
| CPU type | |
| Bus-system | |
| Operating system name | |
| Additional | |

E.2.2 Other information

| |
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History

| Document history | |
|------------------|---|
| June 1996 | Public Enquiry PE 108: 1996-06-24 to 1996-10-18 |
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