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Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 6: Packet switched data



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ETSI

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

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

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Foreword

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

The present document is based on DECT Common Interface (CI) specification EN 300 175, parts 1 to 8 [1] to [8] to enable DECT terminals to interwork in the public and private environment with DECT systems which are connected to a UMTS core infrastructure.

In addition, the present document is based on the DECT Packet Radio Service (DPRS) EN 301 649 [16] to enable the same DECT/UMTS terminal to interwork with a DECT FT complying to the DPRS requirements, irrespective of whether this FT provides residential, business or public access services. General attachment requirements are based on EN 301 406 [15].

The present document is part 6 of a multi-part deliverable covering the Digital Enhanced Cordless Telecommunications (DECT) Universal Mobil Telecommunication System (UMTS) interworking profile as identified below:

- Part 1: "General description and overview";
- Part 2: "CN-FP interworking";
- Part 3: "3,1 kHz speech service";
- Part 4: "Supplementary services";
- Part 5: "SMS point-to-point and cell broadcast";
- Part 6: "Packet switched data".**

The present document defines a general purpose, but strict, mobility profile in terms of features, procedures, data structures, information elements and fields within the information elements at the DECT air interface in order to achieve full inter-operability between equipment, i.e. DECT systems and terminals, which fulfil the requirements of the present document. The present document also fulfils the minimum requirements of the DPRS enabling backwards compatibility with the respective equipment.

Further details on the DECT system may be found in TR 101 178 [17], ETR 043 [18], and in EN 300 176 [19].

1 Scope

The present document specifies the Digital Enhanced Cordless Telecommunications (DECT) access protocols and Fixed Part (PF) and Portable Part (PT) interworking/mappings necessary to ensure that the Universal Mobile Telecommunication System (UMTS) General Packet Radio Service (GPRS) can be provided over DECT.

To enable DECT terminals to interwork with DECT systems which are connected to the UMTS infrastructure, from the DECT side the present document is based on DECT Packet Radio Services EN 301 649 [16] and on the DECT Common Interface specification EN 300 175 parts 1 to 8 [1] to [8] (for the cases not covered by DPRS), from UMTS side the present document assumes interworking with UMTS specification release 4.

An air-interface profile is specified for a particular set of UMTS services so that inter-operability of DECT equipment for these services can be achieved. Interworking functions/mappings are specified for Serving GPRS Support Node (SGSN) attachment for the DECT FT as the FT is using the Iu (PS)-interface towards the UMTS core network in the respect that the FT emulates an UTRAN Radio Network Controller (RNC) with regards to the UTRAN messages which are relevant to the present document.

The present document is based on GPRS as described in TS 123 060 [22], it covers TS 124 008 [24] and TS 125 410 [25] as far as mapping is concerned and as far as this is required for support of packet switched data services. On the DECT side the TS covers DPRS as defined in EN 301 649 [16].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

- [1] ETSI EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] ETSI EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)".
- [3] ETSI EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] ETSI EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] ETSI EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] ETSI EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] ETSI EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security Features".
- [8] ETSI EN 300 175-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech Coding and Transmission".
- [9] ETSI TS 101 863-1: "Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 1: General description and overview".

- [10] ETSI TS 101 863-2: "Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 2: CN-FP interworking".
- [11] ETSI TS 101 863-3: "Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 3: 3,1 kHz speech service".
- [12] ETSI TS 101 863-4: "Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 4: Supplementary services".
- [13] ETSI TS 101 863-5: "Digital Enhanced Cordless Telecommunications (DECT); DECT/UMTS Interworking Profile (IWP); Part 5: SMS point-to-point and cell broadcast".
- [14] ETSI EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [15] ETSI EN 301 406: "Digital Enhanced Cordless Telecommunications (DECT); Harmonized EN for Digital Enhanced Cordless Telecommunications (DECT) covering essential requirements under article 3.2 of the R&TTE Directive; Generic radio".
- [16] ETSI EN 301 649: "Digital Enhanced Cordless Telecommunications (DECT); DECT Packet Radio Services (DPRS)".
- [17] ETSI TR 101 178: "Digital Enhanced Cordless Telecommunications (DECT); A High Level Guide to the DECT Standardization".
- [18] ETSI ETR 043: "Digital Enhanced Cordless Telecommunications (DECT); Common interface (CI); Services and facilities requirements specification".
- [19] ETSI EN 300 176: "Digital Enhanced Cordless Telecommunications (DECT); Approval test specification; (Part 1: Radio; Part 2: Speech)".
- [20] ETSI TR 121 905: "Universal Mobile Telecommunications System (UMTS); Vocabulary for 3GPP Specifications (3GPP TR 21.905)".
- [21] ETSI TS 122 060: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS); Service description; Stage 1 (3GPP TS 22.060)".
- [22] ETSI TS 123 060: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS) Service description; Stage 2 (3GPP TS 23.060)".
- [23] ETSI TS 124 007: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Mobile radio interface signalling layer 3; General aspects (3GPP TS 24.007)".
- [24] ETSI TS 124 008: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3 (3GPP TS 24.008)".
- [25] ETSI TS 125 410: "Universal Mobile Telecommunications System (UMTS); UTRAN Iu Interface: General Aspects and Principles (3GPP TS 25.410)".
- [26] ETSI TS 127 007: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); AT command set for User Equipment (UE) (3GPP TS 27.007)".
- [27] ETSI TS 127 010: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol (3GPP TS 27.010)".
- [28] ETSI TS 127 060: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Mobile Station (MS) supporting Packet Switched Services (3GPP TS 27.060)".

- [29] ETSI EN 300 824: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP)".
- [30] ISO/IEC 8073 (1997): "Information technology - Open Systems Interconnection - Protocol for providing the connection-mode transport service".
- [31] ETSI TS 144 064: "Digital cellular telecommunications system (Phase 2+); Mobile Station - Serving GPRS Support Node (MS-SGSN) Logical Link Control (LLC) Layer Specification (3GPP TS 44.064)".
- [32] ETSI TS 124 065: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS); Mobile Station (MS) - Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNDP) (3GPP TS 24.065)".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 300 175-1 [1] and in TR 121 905 [20] apply.

3.2 Symbols

For the purposes of the present document, the symbols defined in EN 300 175-1 [1] and in TR 121 905 [20] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations defined in EN 300 175-1 [1] and in TR 121 905 [20] and the following apply:

3G	3rd Generation
3GPP	3rd Generation Partnership Project
A/C	Authentication and Ciphering
APN	Access Point Name
CI	Common Interface
CISS	Call Independent Supplementary Services
CLMS	ConnectionLess Message Service
COMS	Connection Oriented Message Service
DECT	Digital Enhanced Cordless Telecommunications
DPRS	DECT Packet Radio Service
FP	Fixed Part
FT	Fixed Termination
GMM	GPRS Mobility Management
GPRS	General Packet Radio Service
IE	Information Element
IETF	Internet Engineering Task Force
IP	Internet Protocol
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
IWU	InterWorking Unit
LCE	Link Control Entity
ME	Mobile Equipment
MM	Mobility Management
NSAPI	Network service access point identifier
PD	Protocol Discriminator
PDP	Packet Data Protocol
PDSS1	Packet Data on Signalling channels Service 1
PP	Portable Part

PT	Portable Termination
RNC	Radio Network Controller
SIM	Subscriber Identity Module
SM	Session Management
SMS	Short Message Services
SS	Supplementary Services
TAF	Terminal Adaptation Function
TE	Terminal Equipment
UE	User Equipment
UE	User Equipment
UMTS	Universal Mobile Telecommunications System
USIM	UMTS SIM
UTRAN	UMTS Terrestrial Radio Access Network

4 General

The present document specifies how UMTS packet switched data services are provided over the DECT air interface. Interworking is based on attachment of the FT-IWU to the UMTS SGSN (figure 1).

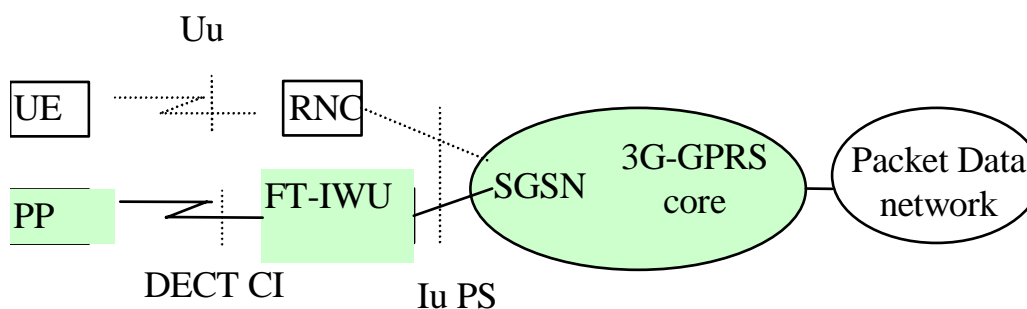


Figure 1: DPRS/GPRS reference model

4.1 Mapping principles

GPRS Mobility Management (GMM) is mapped to DECT Mobility Management (MM); GPRS Session management (SM) to DECT Call Control (CC). Clause 5 describes the mapping procedures in detail. Clause 6 defines the message mappings for this profile, clause 7 the mapping of information elements and clause 8 the mappings of fields.

5 Network Procedures

5.1 UMTS GMM procedures

5.1.1 Attach procedure

The attach procedure of UMTS (TS 124 008 [24] clause 4.7.3) shall be mapped to the feature location registration [DPRS-N.11], DPRS EN 301 649 [16] clause 4.3.4.

5.1.1.1 Attach procedure, successful

Upon receipt of a MM_LOCATE-ind primitive from the FT as a result of a received {LOCATE-REQUEST} message from the PT (figure 2) the FT-IWU shall initiate an UMTS GPRS attach procedure as described in TS 124 008 [24] by sending an ATTACH REQUEST message to the CN if the received {LOCATE-REQUEST} message contains no UMTS <<Linked TI>> information element in the IWU-TO-IWU information elements, if the <<Linked TI>> information element is included the mapping defined in clause 5.1.3 shall be used.

The mapping of the DECT {LOCATE-REQUEST} message to the UMTS GPRS ATTACH REQUEST message is shown in clause 6.2.1.

In overload situations, the FT-IWU may reject the location registration immediately by sending an MM_LOCATE-res primitive with a reject parameter. In this case the primitive shall include a <<DURATION>> information element to indicate a time period in which the PT will not be allowed to re-attempt a location registration within. The PT shall support the <<DURATION>> information element in the {LOCATE-REJECT} message. The value may be based on defined time limit 1 or 2 (see EN 300 175-5 [5]) or the standard time limit, see clause 6.1.1.

The MS network capability information element and the MS Access capability information element shall be forwarded by the FT-IWU to the CN.

The <<Attach type>> information element (TS 124 008 [24] clause 10.5.5.2) shall be set to "001"B (GPRS attach), in cases when a combined attach for GPRS and non-GPRS services shall be performed the rules of TS 124 008 [24] clause 4.7.3.2 shall be followed. The <<Attach type>> information element shall be forwarded by the FT-IWU to the CN.

Upon receipt of an ATTACH ACCEPT from the CN the FT-IWU shall issue a MM_LOCATE-res primitive to the FT. The FT sends a {LOCATE-ACCEPT} message to the PT. The mapping of the UMTS GPRS ATTACH ACCEPT message to the DECT {LOCATE-ACCEPT} message is shown in clause 6.1.1.

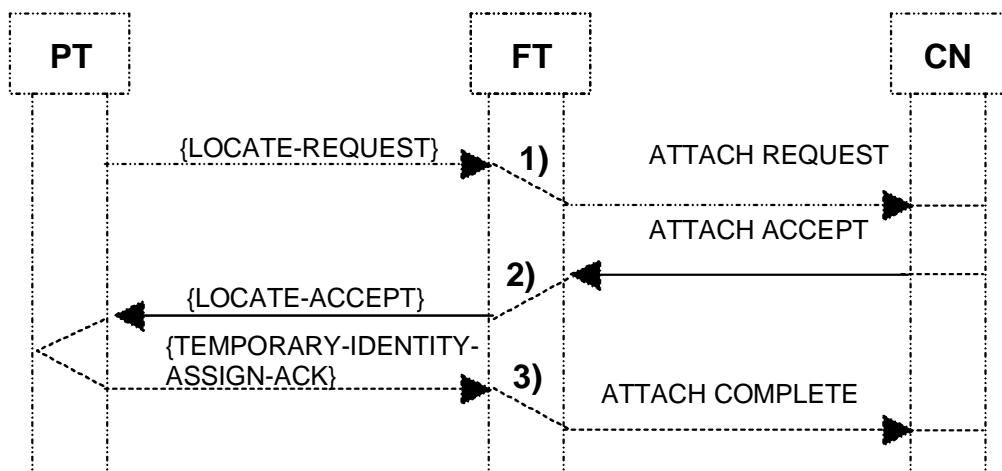


Figure 2: Attach procedure (successful)

The UMTS GPRS <<MS network capability>> information element (TS 124 008 [24] clause 10.5.5.12) generated locally by the FT-IWU shall be set as defined in clause 7.2.2.

The UMTS GPRS <<MS Access capability>> information element (TS 124 008 [24] clause 10.5.5.12a) generated locally by the FT-IWU shall be set as defined in clause 7.2.3.

Upon receipt of MM_IDENTITY_ASSIGN-cfm primitive from the FT as a result of a received {TEMPORARY-IDENTITY-ASSIGN-ACK} message from the PT the FT-IWU shall send an ATTACH COMPLETE message to the CN. The mapping of the DECT {TEMPORARY-IDENTITY-ASSIGN-ACK} message to the UMTS GPRS ATTACH COMPLETE message is shown in clause 6.1.5.

If the timer <MM-ident-1> supervising the reception of the {TEMPORARY-IDENTITY-ASSIGN-ACK} message from the PT expires, the FT-IWU upon receipt of an MM_IDENTITY_ASSIGN_cfm primitive indicating a failure shall terminate the procedure. Any further action in the FT-IWU is implementation dependant.

5.1.1.2 Attach procedure, unsuccessful

In cases when the FT-IWU receives an ATTACH REJECT message in response to an ATTACH REQUEST message sent to the network the FT-IWU shall issue an MM_LOCATE-res primitive with a reject parameter being set. The FT sends a {LOCATE-REJECT} message to the PT. The mapping of the ATTACH REJECT message to the LOCATE REJECT message is shown in clause 6.1.2.

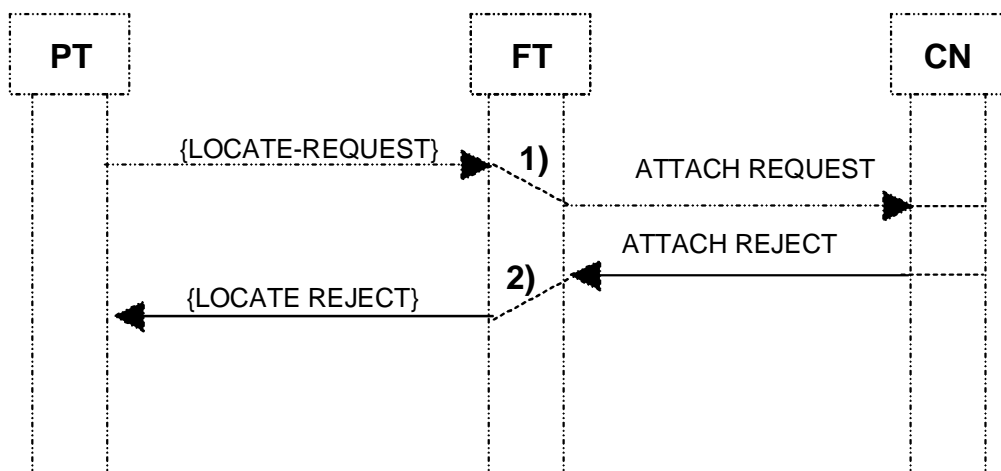


Figure 3: Attach rejected by network

5.1.2 Detach procedure

The detach procedure of UMTS (TS 124 008 [24] clause 4.7.4) shall be mapped to the DECT DETACH message, EN 300 175-5 [5] clause 6.3.6.13.

5.1.2.1 Detach procedure, PT originated

Upon receipt of MM_DETACH-ind primitive from the FT as a result of a received {DETACH} message from the PT (figure 4) the FT-IWU shall initiate an UMTS GPRS detach procedure as described in TS 124 008 [24] clause 4.7.4 by sending a DETACH REQUEST message to the CN. The mapping of the DECT {DETACH} message to the UMTS DETACH REQUEST message is shown in clause 6.2.3.

An UMTS DETACH ACCEPT message received from the CN shall be ignored by the FT-IWU.

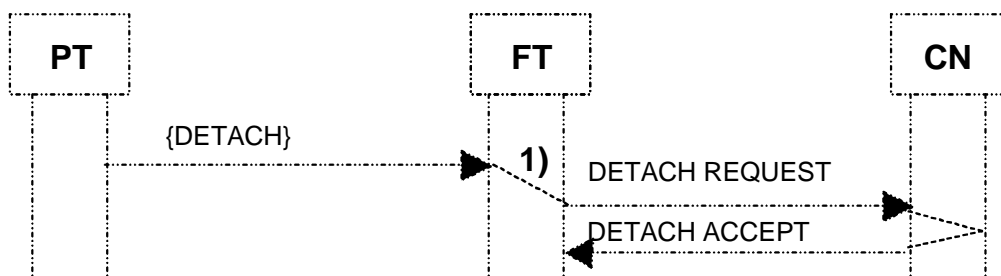


Figure 4: Detach procedure (MS/PT originated)

5.1.2.2 Detach procedure, network originated:

The FT-IWU shall respond with an UMTS DETACH ACCEPT message after receiving an UMTS DETACH REQUEST from the CN; this profile defines no mapping towards the PT as the current version of DECT does not support a network originated detach.

Any further actions in the FT-IWU are implementation dependant.

The {MM-INFO-SUGGEST} message may be used for the case that the UMTS DETACH REQUEST message contains the field value "re-attach required" in the <<Detach type>> information element, the {ACCESS-RIGHTS-TERMINATE-REQUEST} message may be used for the case that the UMTS DETACH REQUEST message contains the field value "re-attach not required" in the <<Detach type>> information element.

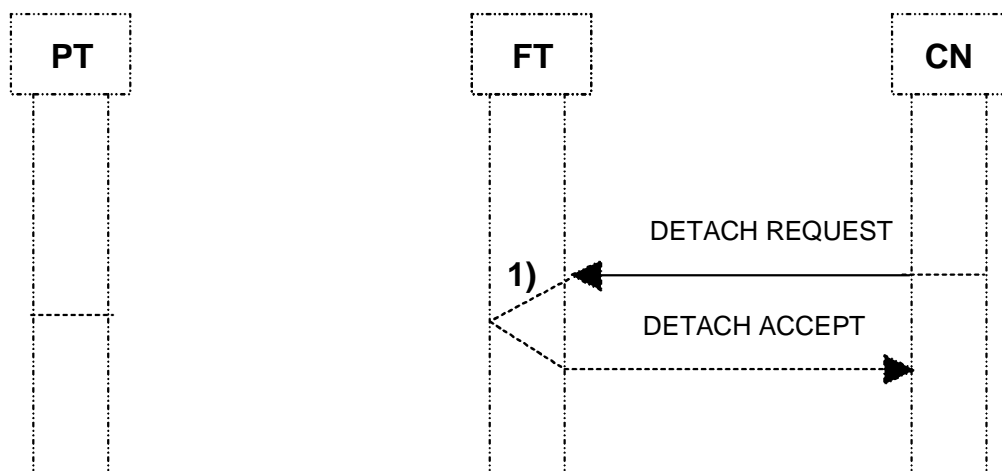


Figure 5: Detach procedure (network originated)

5.1.3 Routing area update

The routing area updating procedure of UMTS (TS 124 008 [24] clause 4.7.5) shall be mapped to the DECT feature location registration [DPRS-N.11], DPRS EN 301 649 [16] clause 4.3.4.

5.1.3.1 Routing area update, successful

Upon receipt of a MM_LOCATE-ind primitive from the FT as a result of a received {LOCATE-REQUEST} message from the PT (figure 6) the FT-IWU shall initiate an UMTS GPRS routing area updating procedure by sending a ROUTING AREA UPDATE REQUEST message to the CN. If the received {LOCATE-REQUEST} message contains an UMTS <<Linked TI>> information element in the IWU-TO-IWU information element, the mapping defined in clause 5.1.1 shall be used.

The mapping of the DECT {LOCATE-REQUEST} message to the UMTS ROUTING AREA UPDATE message is shown in clause 6.2.9.

Upon receipt of an UMTS ROUTING AREA UPDATE ACCEPT message from the CN the FT-IWU shall issue a MM_LOCATE-res primitive to the FT. The FT sends a {LOCATE-ACCEPT} message to the PT. The mapping of the UMTS ROUTING AREA UPDATE ACCEPT message to the DECT {LOCATE-ACCEPT} message is shown in clause 6.1.9.

Upon receipt of MM_IDENTITY_ASSIGN-cfm primitive from the FT as a result of a received {TEMPORARY-IDENTITY-ASSIGN-ACK} message from the PT the FT-IWU shall send a ROUTING AREA UPDATE COMPLETE message to the CN. The mapping of the DECT {TEMPORARY-IDENTITY-ASSIGN-ACK} message to the UMTS ROUTING AREA UPDATE COMPLETE message is shown in clause 6.2.10.

If the timer <MM-ident-1> supervising the reception of the {TEMPORARY-IDENTITY-ASSIGN-ACK} message from the PT expires, the FT-IWU upon receipt of an MM_IDENTITY_ASSIGN_cfm primitive indicating a failure shall terminate the procedure. Any further action in the FT-IWU is implementation dependant.

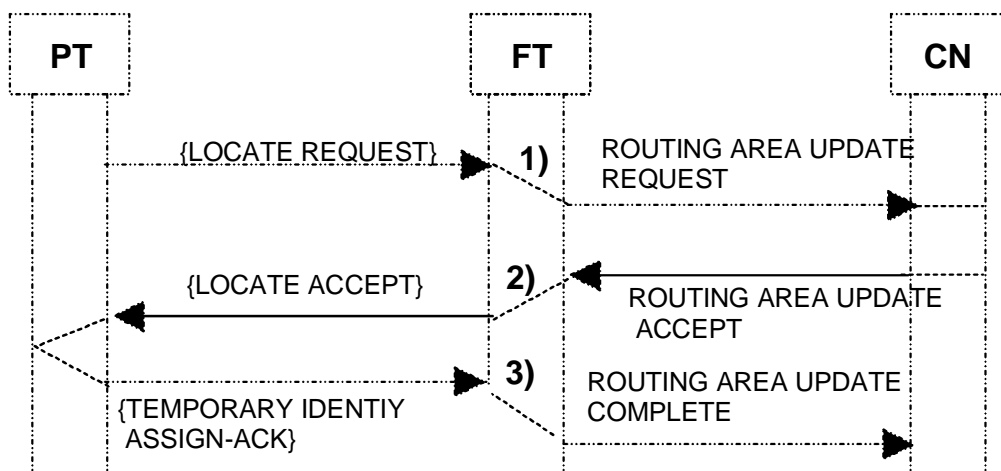


Figure 6: Routing area update procedure, successful

5.1.3.2 Routing area update, unsuccessful, network rejects

In cases when the FT-IWU receives an UMTS ROUTING AREA UPDATE REJECT message in response to a ROUTING AREA UPDATE REQUEST message sent to the network the FT-IWU shall issue an MM_LOCATE-res primitive with a reject parameter being set. The FT sends a {LOCATE-REJECT} message to the PT.

The mapping of the UMTS ROUTING AREA UPDATE REJECT message to the LOCATE REJECT message is shown in clause 6.1.10.

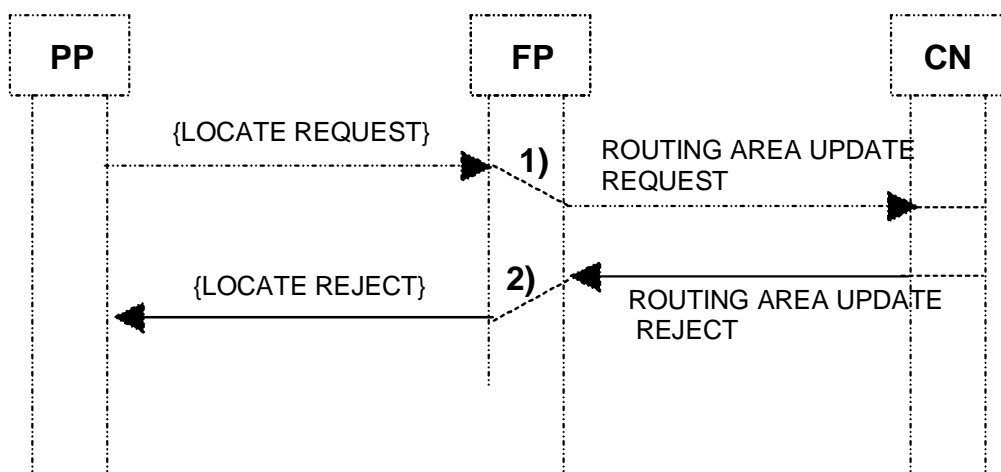


Figure 7: Routing area update procedure, network rejects

5.1.3.3 Routing area update, unsuccessful, MS rejects

Upon receipt of MM_IDENTITY_ASSIGN-cfm primitive from the FT indicating "failure" as a result of a received {TEMPORARY-IDENTITY-ASSIGN-REJ} message from the PT the FT-IWU shall send an UMTS DETACH REQUEST message to the CN. The mapping of the DECT {TEMPORARY-IDENTITY-ASSIGN-REJ} message to the UMTS DETACH REQUEST message is shown in clause 6.2.4.

A DETACH ACCEPT message received from the CN shall be ignored by the FP-IWU.

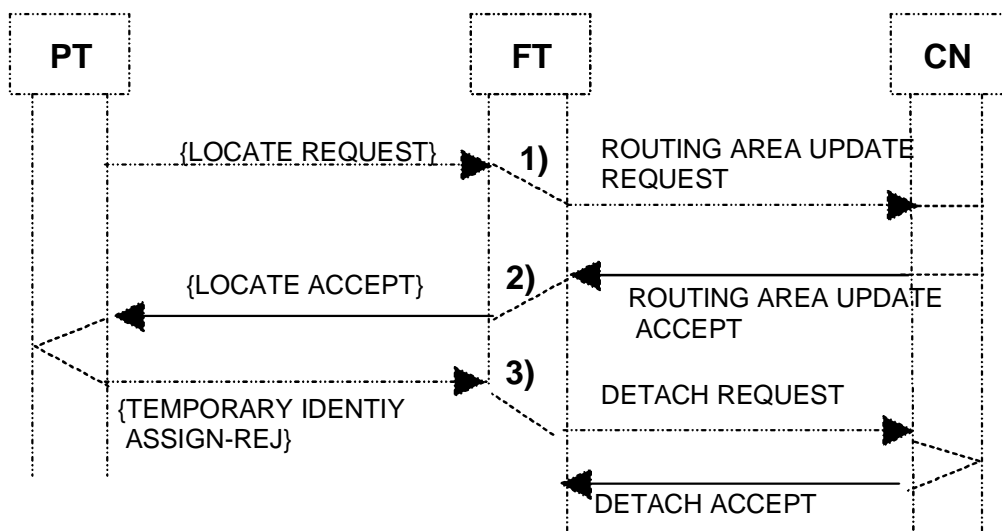


Figure 8: Routing area update procedure, MS rejects

5.1.4 P-TMSI reallocation procedure

The P-TMSI reallocation procedure of UMTS (TS 124 008 [24] clause 4.7.6) shall be mapped to the DECT procedure for temporary identity assignment (EN 300 175-5 [5] clause 13.2.2).

5.1.4.1 P-TMSI reallocation procedure, successful

Upon receipt of a P-TMSI REALLOCATION COMMAND from the CN (figure 9) as a result of a UMTS GPRS P-TMSI reallocation procedure defined in TS 124 008 [24] clause 4.7.6, the FT-IWU shall issue a MM_IDENTITY_ASSIGN-req primitive to the FT initiating the temporary identity assignment procedure by sending a {TEMPORARY-IDENTITY-ASSIGN} message to the PT as described in EN 300 175-5 [5]. The mapping of the P-TMSI REALLOCATION COMMAND message to the DECT {TEMPORARY-IDENTITY-ASSIGN} message is shown in clause 6.1.5.

Upon receipt of a MM_IDENTITY_ASSIGN-cfm primitive as a result of a received {TEMPORARY-IDENTITY-ASSIGN-ACK} message from the PT the FT-IWU shall send a P-TMSI-REALLOCATION COMPLETE message to the CN. The mapping of the DECT {TEMPORARY-IDENTITY-ASSIGN-ACK} message to the P-TMSI REALLOCATION COMPLETE message is shown in clause 6.2.5.

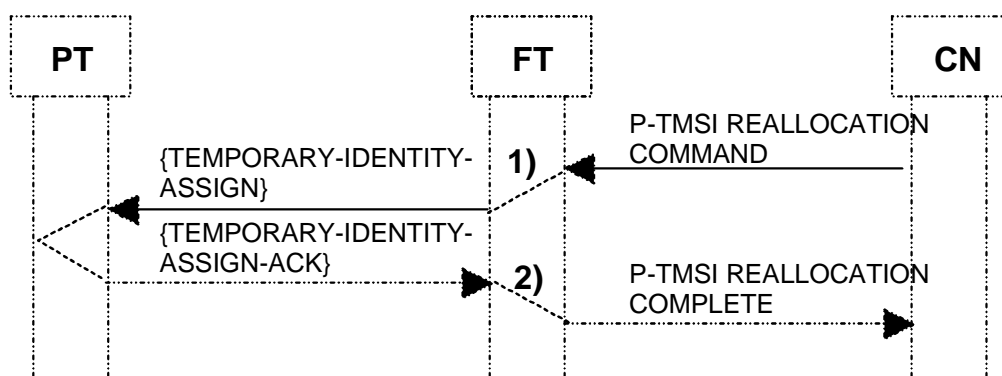


Figure 9: P-TMSI reallocation procedure

5.1.4.2 P-TMSI reallocation procedure, successful

If the PT sends a {TEMPORARY-IDENTITY-ASSIGN-REJ} or timer <MM-ident-1> expires in the FT reflecting in FT-IWU receiving an MM_IDENTITY_ASSIGN-cfm primitive indicating "rejection", the FT-IWU shall send a UMTS GPRS DETACH REQUEST message to the CN, see figure 10. The UMTS GPRS DETACH ACCEPT message received by the FT-IWU shall be ignored.

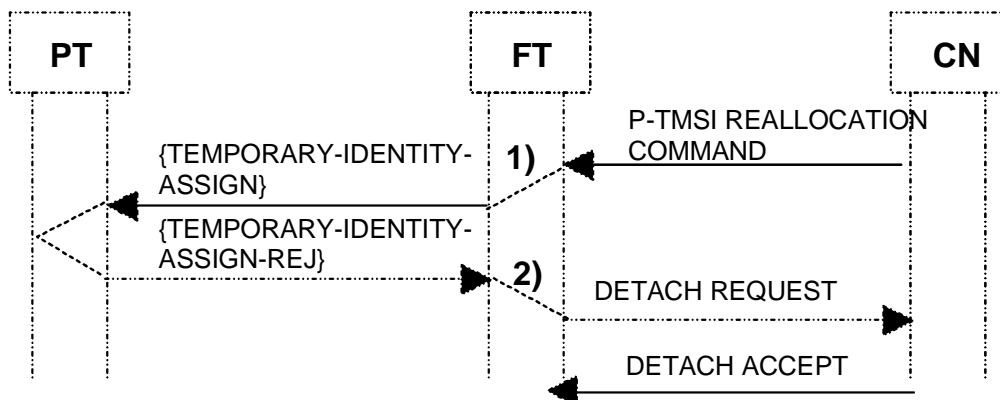


Figure 10: P-TMSI reallocation procedure, unsuccessful

5.1.5 Authentication and Ciphering procedure

The authentication and ciphering procedure of UMTS (TS 124 008 [24] clause 4.7.7) shall be mapped to the DECT feature authentication of PT [DPRS-N.9] DPRS EN 301 649 [16] clause 4.3.4, authentication of FT [DPRS-N.26] DPRS EN 301 649 [16] clause 4.3.4, to features ZAP [DPRS-N.16] DPRS EN 301 649 [16] clause 4.3.4 and Terminate access rights FT initiated [DPRS-N.20] DPRS EN 301 649 [16] clause 4.3.4.

5.1.5.1 Authentication and Ciphering procedure, successful

Upon receipt of an AUTHENTICATION AND CIPHERING REQUEST message (figure 11) from the CN as a result of a GPRS authentication and ciphering procedure as described in TS 124 008 [24] clause 4.4.7 the FT-IWU shall issue a MM_AUTHENTICATE-req primitive to the FT initiating the DECT PT authentication procedure by sending a {AUTHENTICATION-REQUEST} message to the PT. The mapping of the UMTS AUTHENTICATION AND CIPHERING REQUEST message to the DECT {AUTHENTICATION-REQUEST} message is shown in clause 6.1.6.

Upon receipt of an MM_AUTHENTICATE-cfm primitive from the FT as a result of a received {AUTHENTICATION-REPLY} message from the PT the FT-IWU shall send an UMTS GPRS AUTHENTICATION CIPHERING RESPONSE message to the CN.

The mapping of the DECT {AUTHENTICATION-REPLY} message to the UMTS GPRS AUTHENTICATION CIPHERING RESPONSE message is shown in clause 6.2.6.

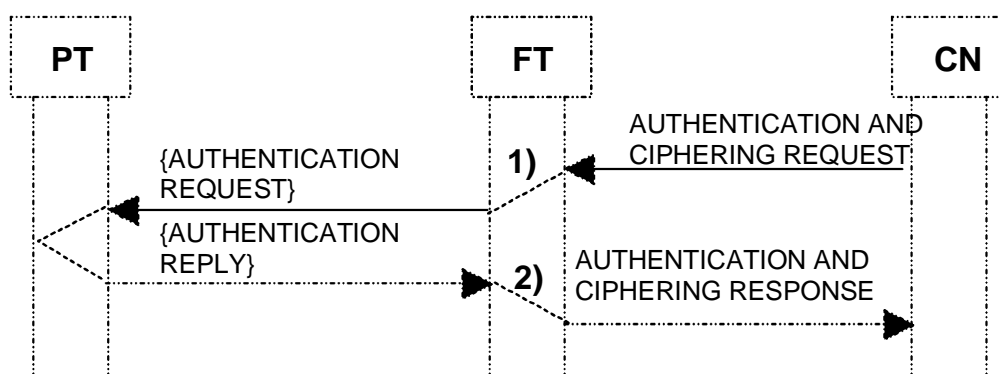


Figure 11: A/C procedure, successful

5.1.5.2 Authentication and Ciphering procedure, unsuccessful authentication (MS)

If a MM_AUTHENTICATE-cfm primitive indicating "rejection" is received by the FT-IWU due to a DECT {AUTHENTICATION REJECT} message sent by the PT, the FT-IWU shall send a UMTS GPRS AUTHENTICATION AND CIPHERING FAILURE message to the CN, see figure 12.

The mapping of the DECT {AUTHENTICATION-REJECT} message to the UMTS GPRS AUTHENTICATION AND CIPHERING FAILURE message is shown in clause 6.2.7.

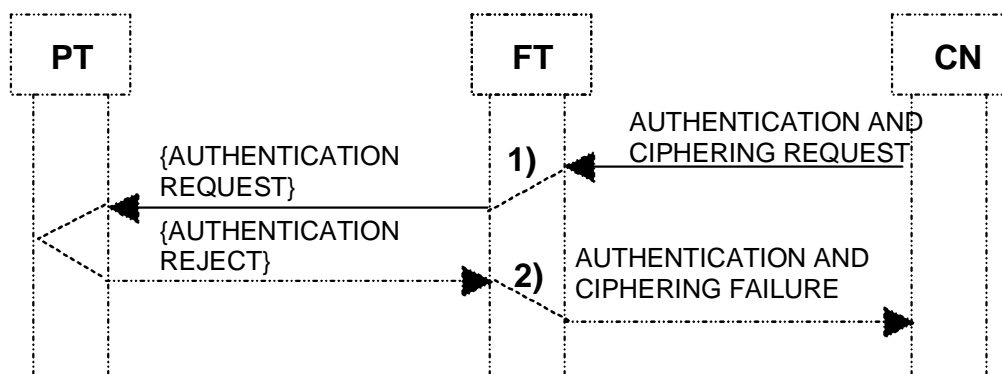


Figure 12: A/C procedure, unsuccessful (MS)

5.1.5.3 Authentication and Ciphering procedure, unsuccessful authentication (network)

If the CN indicates "rejection" by sending an UMTS GPRS AUTHENTICATION AND CIPHERING REJECT message in response to an AUTHENTICATION AND CIPHERING RESPONSE message sent by the FT-IWU, the FT-IWU shall issue a MM_INFO-req primitive to the FT. Upon receiving a MM_INFO-req primitive the FT sends a {MM-INFO-SUGGEST} message, containing an <<INFO-TYPE>> information element with the parameter type "authentication of PT failure", see figure 13.

The mapping of the UMTS GPRS AUTHENTICATION AND CIPHERING REJECT message to the DECT {MM-INFO-SUGGEST} message is shown in clause 6.1.7.

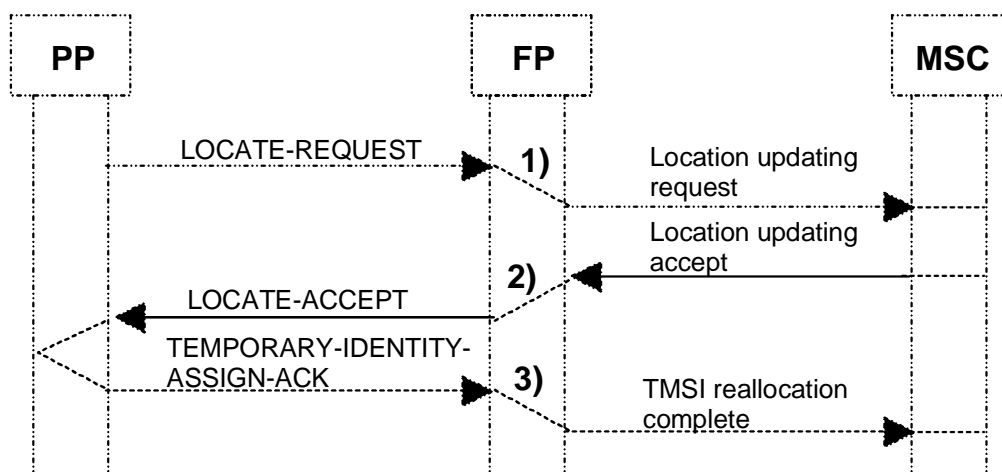


Figure 13: A/C procedure, unsuccessful (network)

5.1.6 Identity procedure

Upon receipt of an UMTS GPRS IDENTITY REQUEST message (figure 14) from the CN as a result of an UMTS identification procedure as described in TS 124 008 [24] clause 4.7.8 the FT-IWU shall issue an MM_IDENTITY-req primitive to the FT initiating the DECT Identification of PT procedure (EN 300 175-5 [5] clause 13.2.1) by sending an {IDENTITY-REQUEST} message to the PT.

The mapping of the received UMTS GPRS IDENTITY REQUEST message to the DECT {IDENTITY-REQUEST} message is shown in clause 6.1.8.

Upon receipt of MM_IDENTITY-cfm primitive from the FT the FT-IWU shall send an UMTS GPRS IDENTITY RESPONSE message to the CN. The mapping of the DECT {IDENTITY-REPLY} message to the UMTS GPRS IDENTITY RESPONSE message is shown in clause 6.2.8.

If the {IDENTITY-REPLY} message contains no information element (meaning of identity request rejection) or if the timer <MM-ident-2> expires in the FT, i.e. {IDENTITY-REPLY} message has not been received from the PT, the FT-IWU, upon receipt of MM_IDENTITY-cfm primitive from the FT indicating a failure shall terminate the procedure. Any further actions in the FT-IWU are implementation dependant.

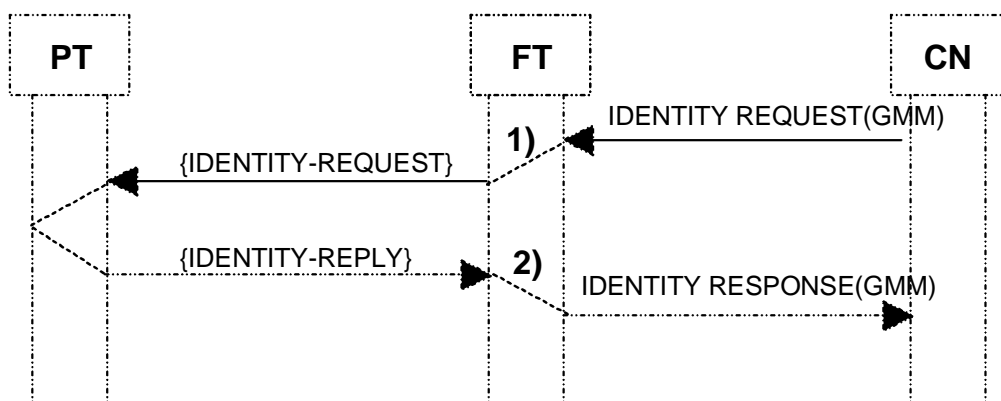


Figure 14: Identity procedure

5.1.7 GMM information and status procedures

The GMM information and status procedures shall be mapped to the DECT external protocol information procedure EN 300 175-5 [5] clause 13.9.

5.1.7.1 GMM Information procedure

Upon receipt of an UMTS GMM INFORMATION message (figure 15) as part of an UMTS GMM information procedure as defined in TS 124 008 [24] clause 4.7.12, the FT-IWU shall issue a MM_IWU-req primitive to the FT initiating the transmission of a DECT {MM-IWU} message.

The mapping between the UMTS GMM INFORMATION message and the DECT {MM-IWU} message is shown in clause 6.1.12.

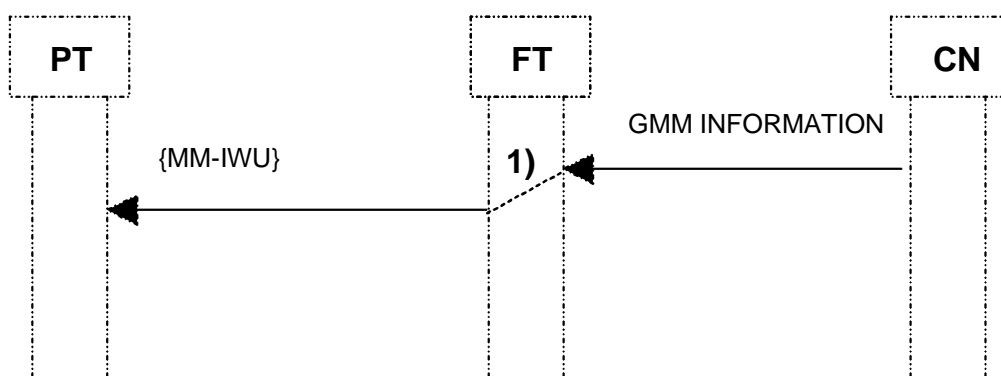


Figure 15: GMM Information procedure

5.1.7.2 GMM Status procedure, MS originated

The PT-IWU shall issue a DECT MM_IWU-req primitive to initiate the UMTS GMM status procedure as defined in TS 124 008 [24] clause 4.7.10 by sending a {MM-IWU} message containing an UMTS GMM STATUS message in the IWU-TO-IWU information element to the FT, see figure 16.

The FT-IWU shall send an UMTS GMM STATUS message to the CN upon receipt of a MM_IWU-ind primitive containing an UMTS GMM STATUS message in the IWU-TO-IWU information element.

The mapping between the DECT {MM-IWU} message and the UMTS GMM STATUS message is shown in clause 6.2.11.

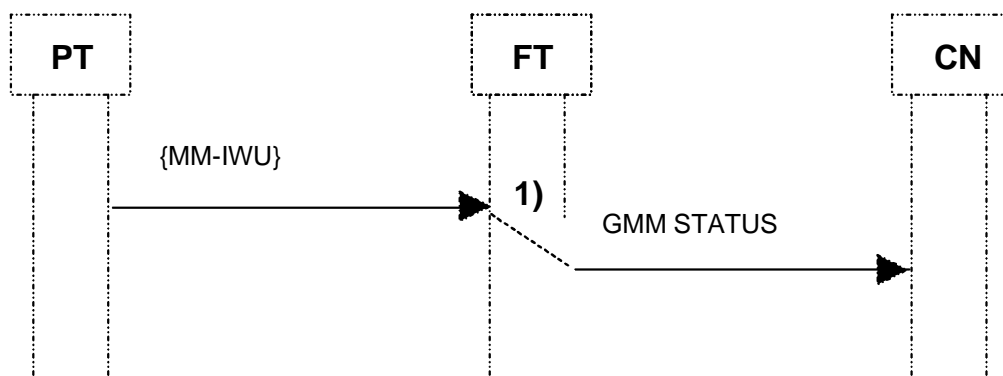


Figure 16: GMM Information procedure, MS originated

5.1.7.3 GMM Status procedure, network originated

Upon receipt of an UMTS GMM STATUS message (figure 17) as part of an UMTS GMM status procedure as defined in TS 124 008 [24] clause 4.7.10, the FT-IWU shall issue a MM_IWU-req primitive to the FT initiating the transmission of a DECT {MM-IWU} message.

The mapping between the UMTS GMM STATUS message and the DECT {MM-IWU} message is shown in clause 6.1.11.

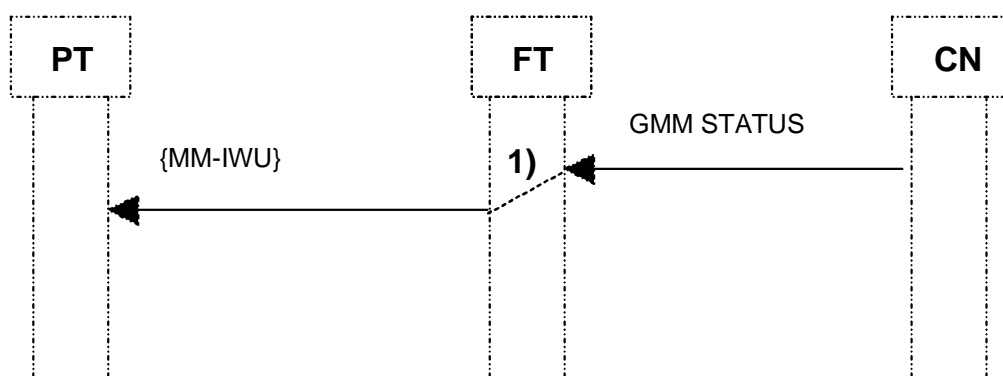


Figure 17: GMM STATUS procedure, network originated

5.1.8 Service Request Procedure

The service request procedure shall be performed as defined in TS 124 008 [24] clause 4.7.13.

5.1.8.1 Service Request Procedure, successful

Upon receipt of a MM_IWU-ind primitive from the FT as a result of a received {MM-IWU} message containing an UMTS SERVICE REQUEST message in the IWU-TO-IWU information element from the PT (figure 18) the FT-IWU shall send the UMTS SERVICE REQUEST message to the CN.

The mapping of the DECT {MM-IWU} message to the SERVICE REQUEST message is shown in clause 6.2.12.

Upon receipt of a SERVICE ACCEPT message from the CN the FT-IWU shall issue a MM_IWU-req primitive to the FT. The FT sends a {MM-IWU} message containing the UMTS SERVICE ACCEPT message in the IWU-TO-IWU information element to the PT.

The mapping of the UMTS SERVICE ACCEPT message to the DECT {MM-IWU} message is shown in clause 6.1.13.

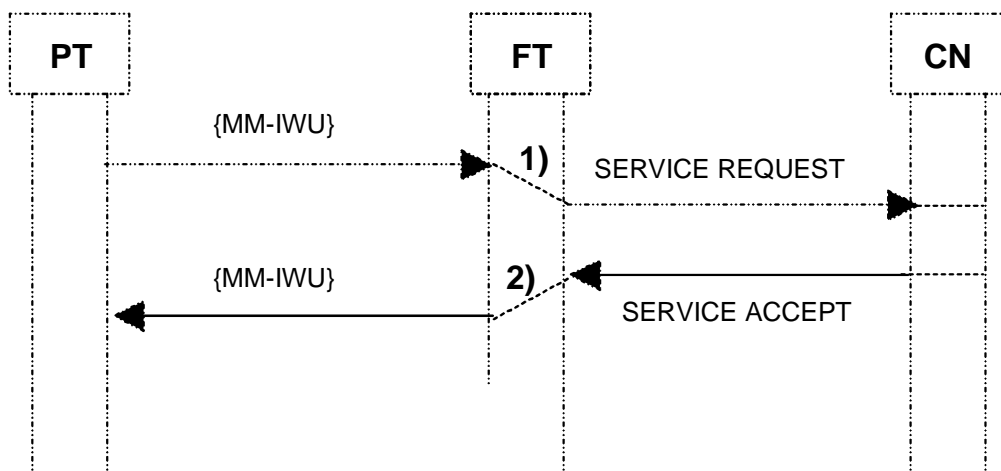


Figure 18: Service procedure, successful

5.1.8.2 Service Request Procedure, unsuccessful

Upon receipt of a SERVICE REJECT message indicating a "reject" from the CN the FT-IWU shall issue a MM_IWU-req primitive to the FT. The FT sends a {MM-IWU} message containing the UMTS SERVICE REJECT message in the IWU-TO-IWU information element to the PT.

The mapping of the UMTS SERVICE REJECT message to the DECT {MM-IWU} message is shown in clause 6.1.14.

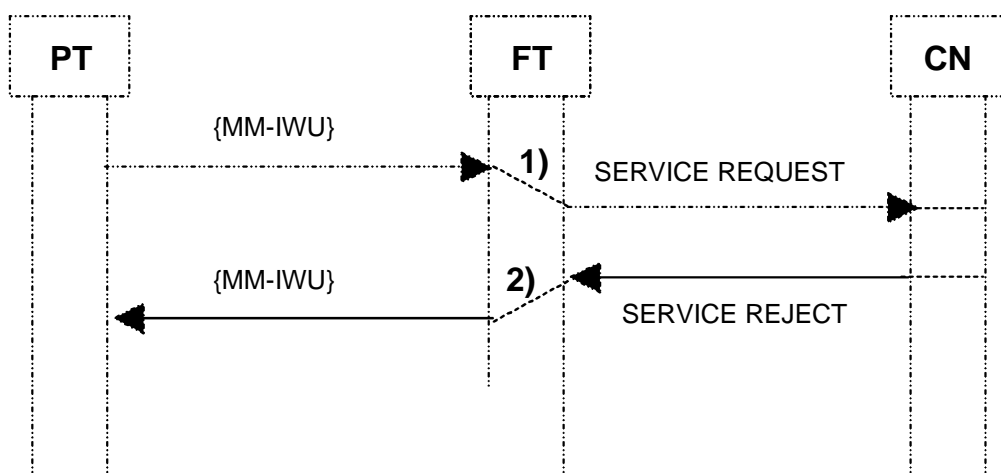


Figure 19: Service procedure, successful

5.2 UMTS SM procedures

The GPRS SM procedures (TS 124 008 [24] clause 6.1.3) are mapped to the feature "outgoing call" [DPRS-N.1], "off-hook" [DPRS-N.2], "on-hook (FULL Release)" [DPRS-N.3], "incoming call" [DPRS-N.8] and "in call service change" [DPRS-N.35].

5.2.1 PDP context activation procedure

PDP context shall be activated as defined in TS 124 008 [24] clause 6.1.3.1.

The UMTS GPRS service request procedure (as defined in clause 5.1.7) shall occur prior to the PDP context activation procedure.

5.2.1.1 PT initiated PDP context activation, successful

The PT IWU uses the DECT MNCC_SETUP-req primitive as a result of a "PDP context activation initiated by the mobile station" procedure as described in TS 124 008 [24] clause 6.1.3.1.1. The PT starts call establishment by sending a {CC-SETUP} message to the FT. Upon receipt of a MNCC_SETUP-ind primitive at the FT-IWU, the FT-IWU shall send an UMTS ACTIVATE PDP CONTEXT REQUEST to the CN, see figure 20.

The mapping between the DECT {CC-SETUP} message and the UMTS ACTIVATE PDP CONTEXT REQUEST message is shown in clause 6.2.13.

Upon receipt of an UMTS ACTIVATE PDP CONTEXT ACCEPT message the FT-IWU shall issue a MNCC_SETUP-cfm primitive to the FT which shall send a DECT {CC-CONNECT} message to the PT.

The mapping between the UMTS ACTIVATE PDP CONTEXT ACCEPT message and the DECT {CC-CONNECT} message is shown in clause 6.1.15.

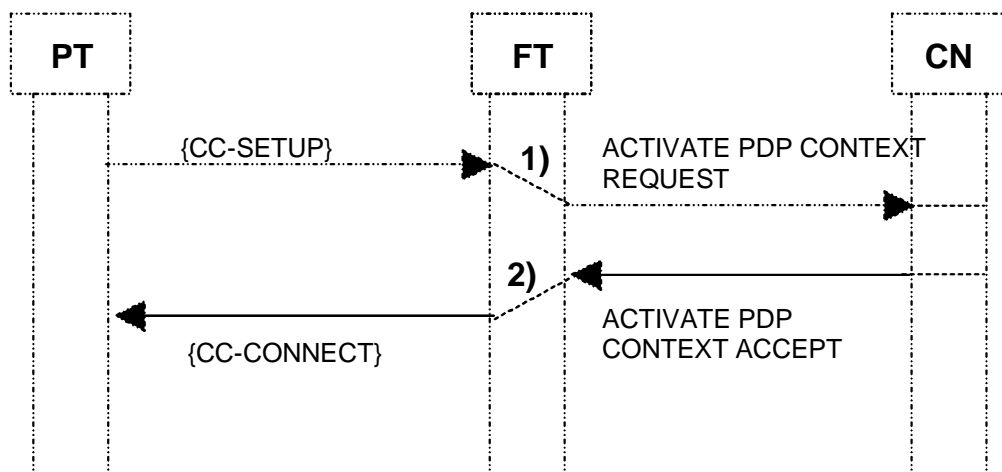


Figure 20: PT originated PDP context activation

5.2.1.2 PT initiated PDP context activation, unsuccessful

Upon receipt of an UMTS ACTIVATE PDP CONTEXT REJECT message indicating an unsuccessful PDP context activation the FT-IWU shall issue a MNCC_REJECT-req primitive to the FT which shall send a DECT {CC-RELEASE-COM} message to the PT.

The mapping between the UMTS ACTIVATE PDP CONTEXT REJECT message and the DECT {CC-RELEASE-COM} message is shown in clause 6.1.16.

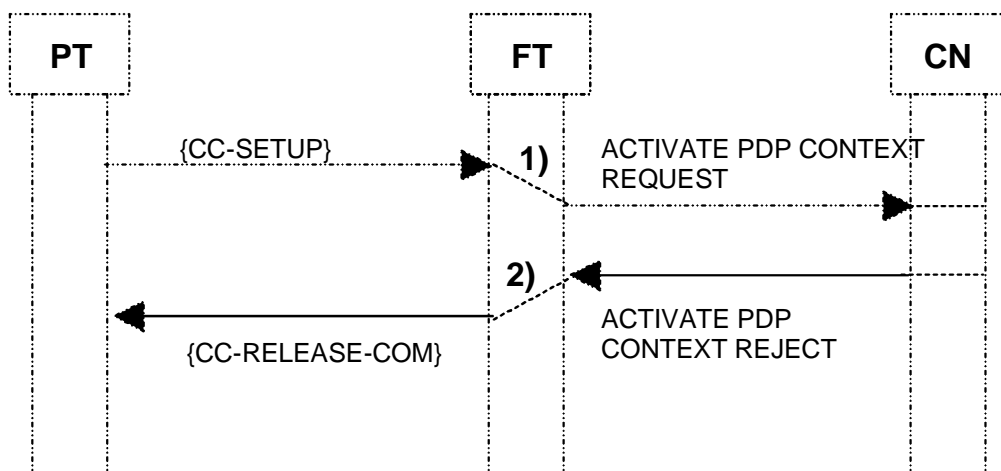


Figure 21: PT originated PDP context activation, unsuccessful

5.2.1.3 Network initiated PDP context activation

Upon receipt of an UMTS REQUEST PDP CONTEXT ACTIVATION message as part of the "PDP context activation requested by the network" procedure as defined in TS 124 008 [24] clause 6.1.3.1.2, the FT-IWU shall issue a MM_IWU-req primitive causing the FT to send the DECT {MM-IWU} message to the PT containing the UMTS PDP CONTEXT ACTIVATION message in an IWU-TO-IWU information element, see figure 22.

The mapping between the UMTS REQUEST PDP CONTEXT ACTIVATION message and the DECT {MM-IWU} message is shown in clause 6.1.19.

Upon receipt of an MM-IWU-ind primitive containing an UMTS REQUEST PDP CONTEXT ACTIVATION message the PT IWU shall either reject the PDP context activation (according to TS 124 008 [24] clause 6.1.3.1.2) as described in clause 5.2.4.1 or accept by sending a MNCC_SETUP-req primitive as described in clause 5.2.1.1.

The PT shall send a DECT {CC-SETUP} message including the UMTS transaction identifier as IWU-TO-IWU information element. The FT-IWU shall use this transaction identifier for the succeeding message transactions by mapping this UMTS transaction identifier to the DECT transaction identifier used by the {CC-SETUP} message.

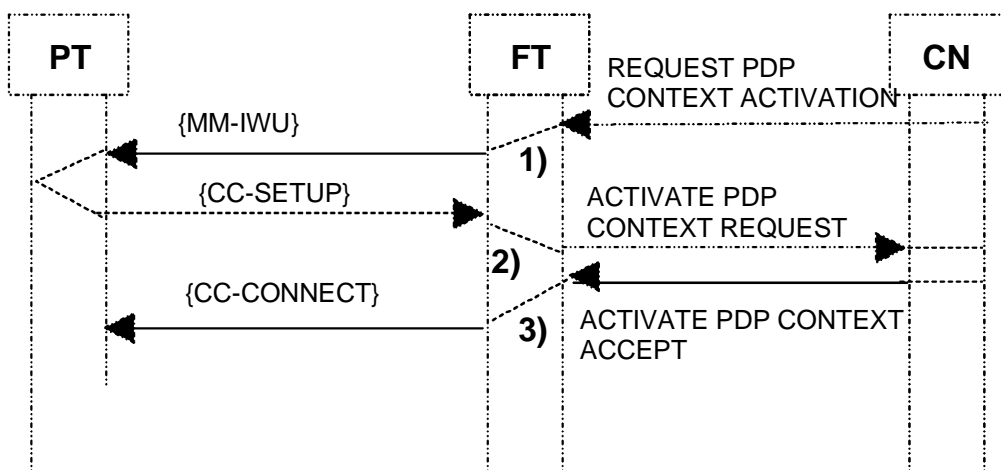


Figure 22: Network originated PDP context activation

5.2.1.4 Network initiated PDP context activation, unsuccessful

a) network rejects context activation

If the CN indicates "failure" by sending an UMTS ACTIVATE PDP CONTEXT REJECT message in response to an ACTIVATE PDP CONTEXT REQUEST message sent by the FT-IWU, the FT-IWU shall issue a MNCC_REJECT-req primitive to the FT. Upon receipt of a MNCC_REJECT-req primitive the FT sends a {CC-RELEASE-COM} message to the PT, see figure 23.

The mapping between the UMTS ACTIVATE PDP CONTEXT REJECT message and the DECT {CC-RELEASE-COM} message is shown in clause 6.1.16.

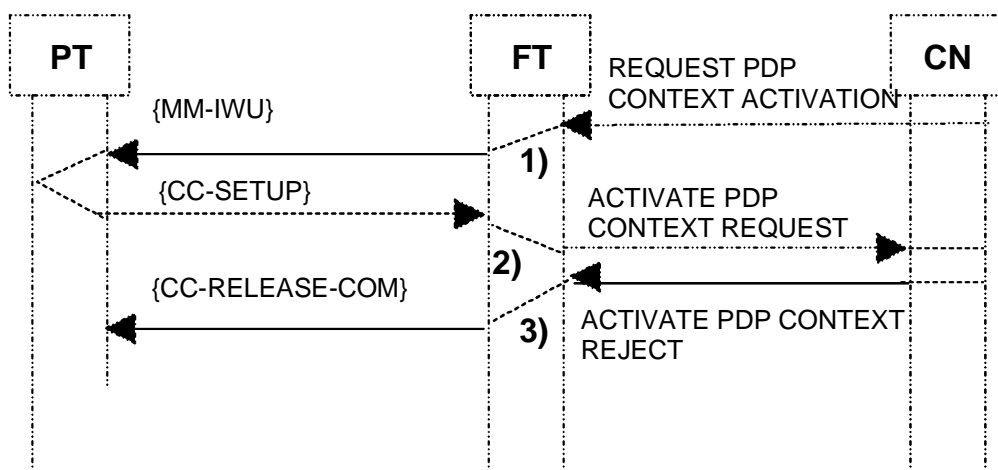


Figure 23: Network originated PDP context activation, unsuccessful (PT)

b) FT PT rejects context activation

If the PT-IWU indicates "rejection" by sending a MNCC_REJECT-req to the PT, the PT shall issue a {CC-RELEASE-COM} message to the FT containing the UMTS transaction identifier as IWU-TO-IWU information element, see figure 24. The FT-IWU shall use this transaction identifier for the succeeding message transaction(s) by mapping this UMTS transaction identifier to the DECT transaction identifier used by the {CC-RELEASE-COM} message.

Upon receipt of a MNCC_REJECT-ind primitive the FT-IWU shall send a UMTS REQUEST PDP CONTEXT ACTIVATION REJECT message to the CN.

The mapping between the DECT {CC-RELEASE-COM} message UMTS REQUEST PDP CONTEXT ACTIVATION REJECT message is shown in clause 6.2.15.

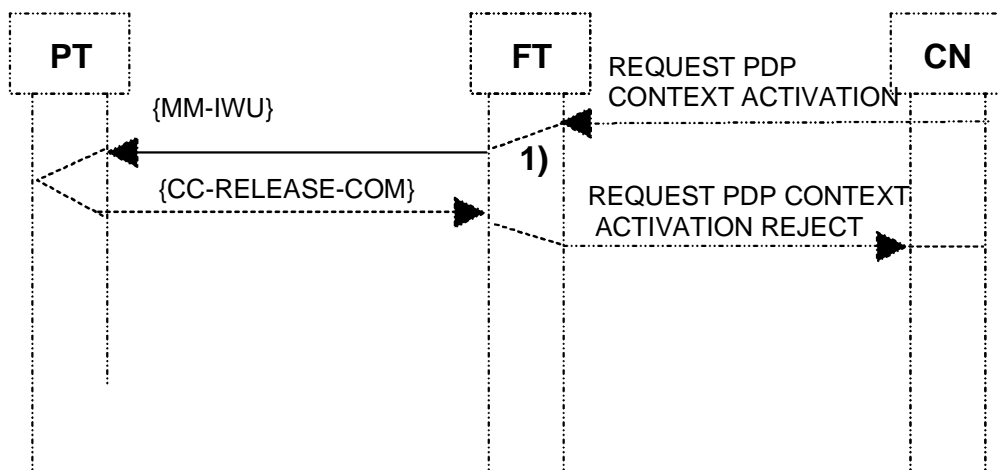


Figure 24: Network originated PDP context activation, unsuccessful (PT)

5.2.2 Secondary PDP context activation procedure

Secondary PDP context activation shall be performed as defined in TS 124 008 [24] clause 6.1.3.2.

5.2.2.1 Successful activation

Upon receipt of a MNCC_SETUP-req primitive as part of a secondary PDP context activation procedure the PT shall send a {CC-SETUP} message to the FT. In response to the MNCC_SETUP-ind primitive received by the FT-IWU the FT shall send a UMTS ACTIVATE SECONDARY PDP CONTEXT REQUEST to the CN.

The mapping between the DECT {CC-SETUP} message and the UMTS ACTIVATE SECONDARY PDP CONTEXT REQUEST message is shown in clause 6.2.14.

Upon receipt of a UMTS ACTIVATE SECONDARY PDP CONTEXT ACCEPT message the FT-IWU shall issue a MNCC_SETUP-cfm primitive to the FT which shall send a DECT {CC-CONNECT} message to the PT.

The mapping between the UMTS ACTIVATE SECONDARY PDP CONTEXT ACCEPT message and the DECT {CC-CONNECT} message is shown in clause 6.1.17.

NOTE: The UMTS <<Linked TI information>> element contained in the IWU-TO-IWU information element of the DECT {CC-SETUP} message can be used by the FT-IWU to distinguish between the secondary PDP context activation procedure and the PDP context activation procedure described in clause 5.2.1.

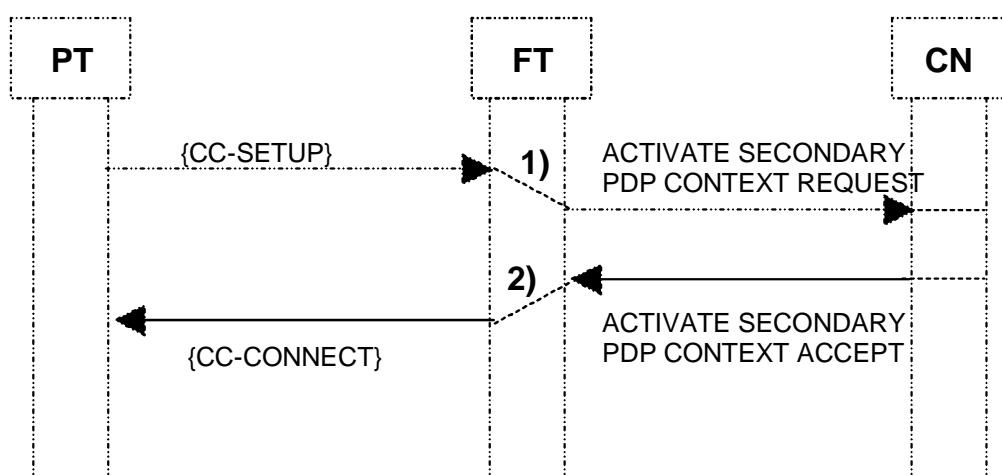


Figure 25: Secondary PDP context activation procedure

5.2.2.2 Unsuccessful activation

If the CN indicates "failure" by sending a UMTS ACTIVATE SECONDARY PDP CONTEXT REJECT message in response to a ACTIVATE SECONDARY PDP CONTEXT REQUEST message sent by the FT-IWU, the FT-IWU shall issue a MNCC_REJECT-req primitive to the FT. Upon receipt of a MNCC_REJECT-req primitive the FT sends a {CC-RELEASE-COM} message to the PT, see figure 26.

The mapping between the UMTS ACTIVATE SECONDARY PDP CONTEXT REJECT message and the DECT {CC-RELEASE-COM} message is shown in clause 6.1.18.

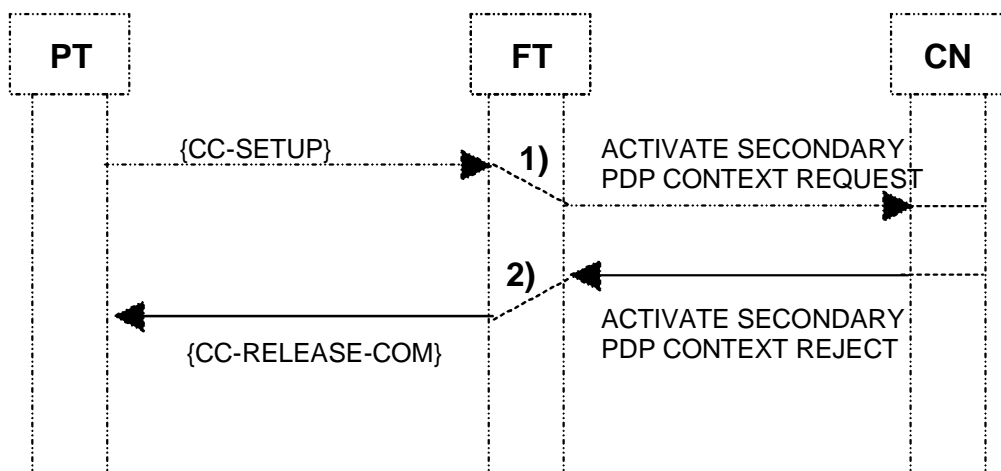


Figure 26: Secondary PDP context activation procedure, unsuccessful

5.2.3 PDP context modification procedure

PDP context modification shall be performed as defined in TS 124 008 [24] clause 6.1.3.3.

5.2.3.1 Network originated PDP context modification procedure

Upon receipt of an UMTS MODIFY PDP CONTEXT REQUEST message (figure 27) from the CN as a result of an UMTS PDP context modification procedure the FT-IWU shall issue a MNCC-MODIFY-req primitive to the FT initiating the DECT service change procedure (EN 300 175-5 [5] clause 9.6) by sending an {CC-SERVICE-CHANGE} message to the PT.

The mapping of the received UMTS MODIFY PDP CONTEXT REQUEST message to the DECT {CC-SERVICE-CHANGE} message is shown in clause 6.1.20.

Upon receipt of MNCC-MODIFY-res primitive from the FT the FT-IWU shall send an UMTS MODIFY PDP CONTEXT ACCEPT message to the CN. The mapping of the DECT {CC-SERVICE-ACCEPT} message to the UMTS MODIFY PDP CONTEXT ACCEPT message is shown in clause 6.2.17.

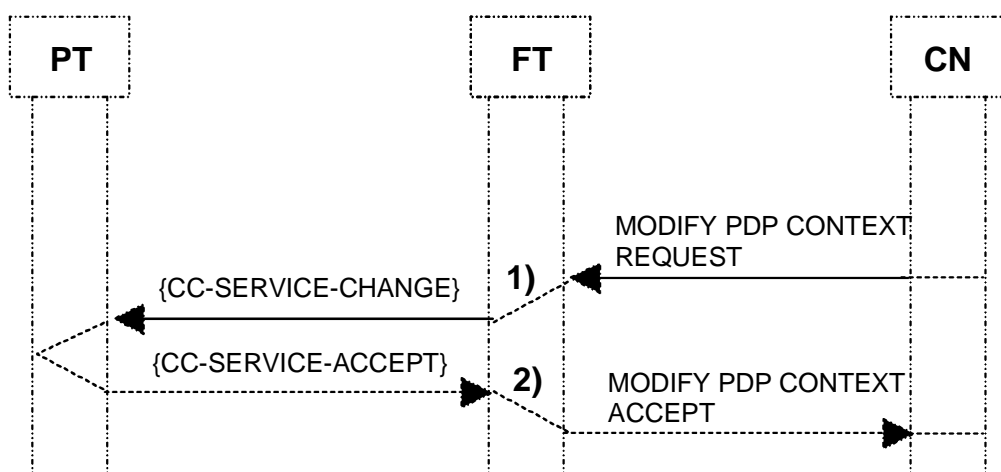


Figure 27: PDP context modification procedure (network originated)

5.2.3.2 PT originated PDP context modification procedure

Upon receipt of a MNCC-MODIFY-ind primitive from the FT as a result of a received {CC-SERVICE-CHANGE} message from the PT (figure 28) the FT-IWU shall initiate an UMTS PT originated PDP context modification procedure as described in TS 124 008 [24] clause 6.1.3.3.2 by sending a MODIFY PDP CONTEXT REQUEST message to the CN. The mapping of the DECT {CC-SERVICE-CHANGE} message to the UMTS MODIFY PDP CONTEXT REQUEST message is shown in clause 6.2.16.

Upon receipt of a MODIFY PDP CONTEXT ACCEPT from the CN the FT-IWU shall issue a MNCC-MODIFY-cfm primitive to the FT. The FT sends a {CC-SERVICE-ACCEPT} message to the PT.

The mapping of the UMTS MODIFY PDP CONTEXT ACCEPT message to the DECT {CC-SERVICE-ACCEPT} message is shown in clause 6.1.21.

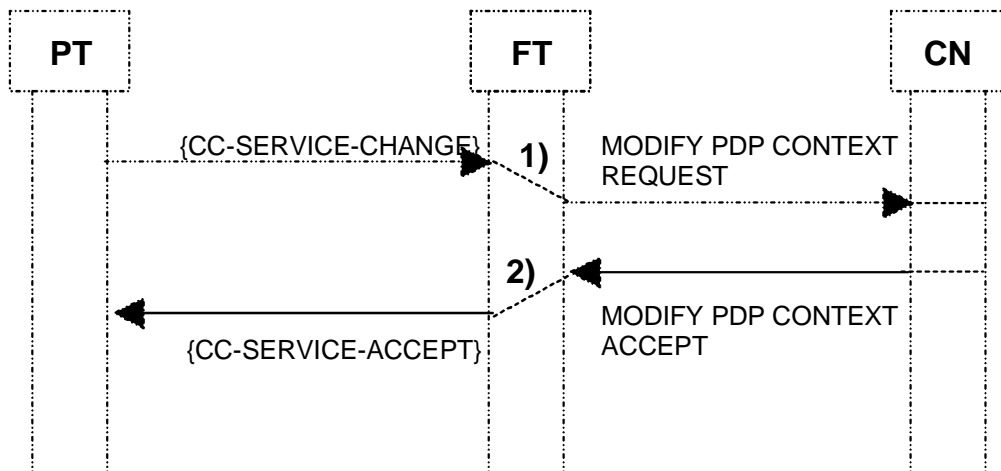


Figure 28: PDP context modification procedure (PT originated)

5.2.3.3 PT originated PDP context modification procedure, unsuccessful

If the CN indicates "failure" by sending an UMTS MODIFY PDP CONTEXT REJECT message in response to a MODIFY PDP CONTEXT REQUEST message sent by the FT-IWU, the FT-IWU shall issue a MNCC-MODIFY-cfm indicating failure to the FT. Upon receipt of a MNCC-MODIFY-cfm primitive the FT sends a {CC-SERVICE-REJECT} message to the PT, see figure 29.

The mapping of the UMTS MODIFY PDP CONTEXT REJECT message to the DECT {CC-SERVICE-REJECT} message is shown in clause 6.1.22.

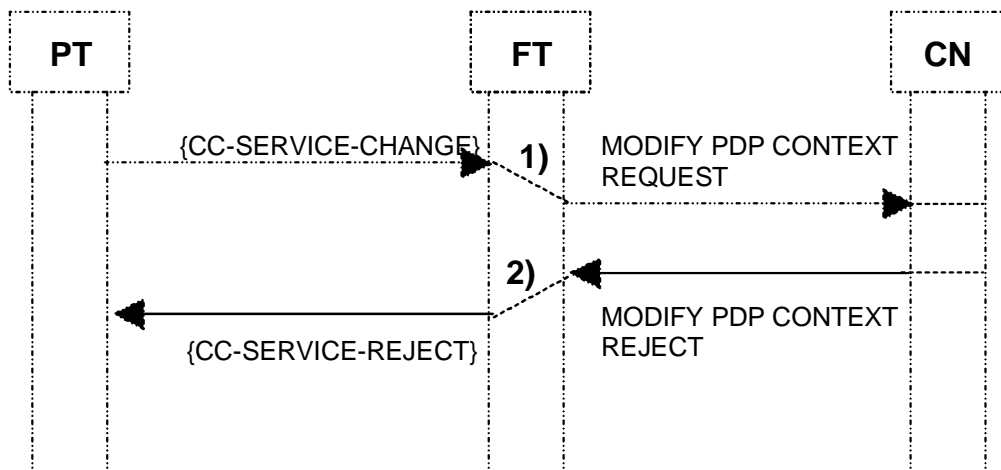


Figure 29: PDP context modification procedure (PT originated, unsuccessful)

5.2.4 PDP context deactivation procedure

PDP context deactivation shall be performed as defined in TS 124 008 [24] clause 6.1.3.4.

5.2.4.1 Network originated deactivation

Upon receipt of an UMTS DEACTIVATE PDP CONTEXT REQUEST message (figure 30 from the CN as a result of an UMTS PDP context deactivation procedure the FT-IWU shall issue a MNCC_RELEASE-req primitive to the FT initiating the DECT call release procedure (EN 300 175-5 [5] clause 9.5) by sending an {CC-SERVICE-CHANGE} message to the PT.

The mapping of the UMTS DEACTIVATE PDP CONTEXT REQUEST message to the DECT {CC-RELEASE-COM} message is shown in clause 6.1.23.

Upon receipt of MNCC_RELEASE-res primitive from the FT the FT-IWU shall send an UMTS DEACTIVATE PDP CONTEXT ACCEPT message to the CN. The mapping of the DECT {CC-RELEASE-COM} message to the UMTS DEACTIVATE PDP CONTEXT REQUEST message is shown in clause 6.2.19.

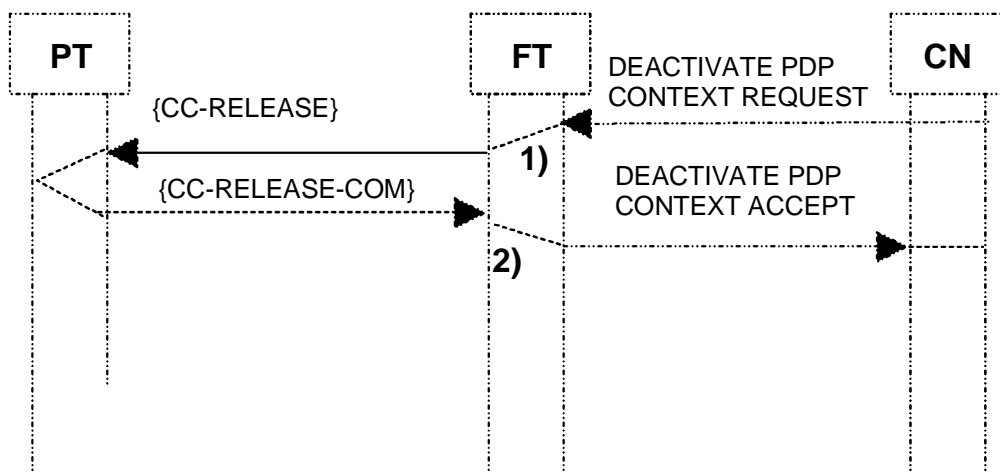


Figure 30: Network originated PDP context deactivation

5.2.4.2 PT originated deactivation

Upon receipt of a MNCC_RELEASE-ind primitive from the FT as a result of a received {CC-RELEASE} message from the PT (figure 31) the FT-IWU shall initiate an UMTS PT originated PDP context deactivation procedure by sending a DEACTIVATE PDP CONTEXT REQUEST message to the CN.

The mapping of the DECT {CC-RELEASE} message to the UMTS DEACTIVATE PDP CONTEXT REQUEST message is shown in clause 6.2.18.

Upon receipt of a DEACTIVATE PDP CONTEXT ACCEPT message from the CN the FT-IWU shall issue a MNCC_RELEASE-cfm primitive to the FT. The FT sends a {CC-RELEASE-COM} message to the PT.

The mapping of the UMTS DEACTIVATE PDP CONTEXT ACCEPT message to the DECT {CC-RELEASE-COM} message is shown in clause 6.1.24.

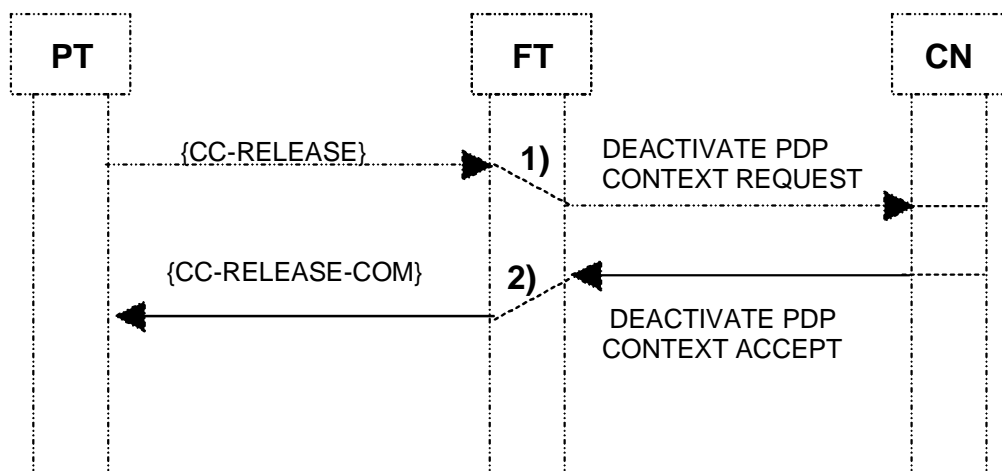


Figure 31: PT originated PDP context deactivation

5.2.5 SM Status message

If the FT-IWU receives an UMTS SM STATUS message no state transition and no specific action shall be taken, i.e. local actions are possible (see TS 124 008 [24] clause 6.1.3.6).

5.2.5.1 Network originated SM Status message

Upon receipt of an UMTS SM STATUS message (figure 32) from the CN the FT-IWU shall issue a MM_IWU-req primitive to the FT initiating the DECT external protocol information procedure (EN 300 175-5 [5] clause 13.9) by sending an {MM-IWU} message containing the UMTS SM STATUS message in an IWU-TO-IWU information element to the PT.

The mapping of the UMTS SM STATUS message to the DECT {MM-IWU} message is shown in clause 6.1.25.

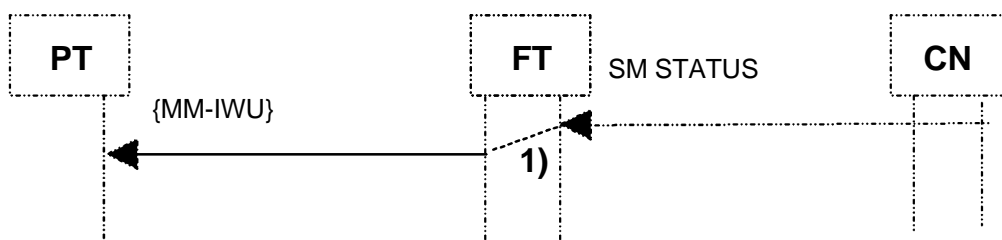


Figure 32: Network originated SM Status

5.2.5.2 PT originated SM Status message

Upon receipt of a MM_IWU-ind primitive containing an UMTS SM STATUS message in the IWU-TO-IWU information element from the FT as a result of a received {MM-IWU} message from the PT (figure 33) the FT-IWU shall the UMTS SM STATUS message to the CN.

The mapping of the DECT {MM-IWU} message to the UMTS SM STATUS message is shown in clause 6.2.20.

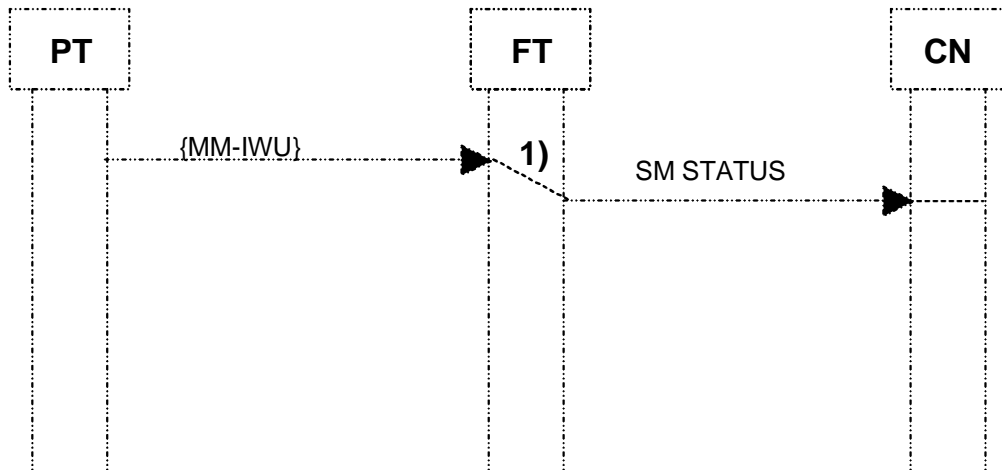


Figure 33: PT originated SM Status

6 Message mappings

NOTE: As there are slight variations between different UMTS documents, UMTS messages have been named according to TS 124 008 [24].

6.1 UMTS to DECT

Table 1 lists the mapping of messages sent from the UMTS core network to the DECT portable part.

Table 1: List of mapped messages

Item No	UMTS Message	DECT Message	Map status
1	ATTACH ACCEPT (GMM)	{LOCATE ACCEPT}	M
2	ATTACH REJECT (GMM)	{LOCATE REJECT}	M
3	Void	Void	-
4	Void	Void	-
5	P-TMSI REALLOCATION COMMAND (GMM)	{TEMPORARY-IDENTITY-ASSIGN} (3)	M
6	AUTHENTICATION AND CIPHERING REQUEST (GMM)	{AUTHENTICATION-REQUEST} (3)	M
7	AUTHENTICATION AND CIPHERING REJECT (GMM)	{MM-INFO-SUGGEST}(3)	M
8	IDENTITY REQUEST (GMM)	{IDENTITY-REQUEST}(3)	M
9	ROUTING AREA UPDATE ACCEPT (GMM)	{LOCATE-ACCEPT}(3)	M
10	ROUTING AREA UPDATE REJECT (GMM)	{LOCATE-REJECT}(3)	M
11	GMM STATUS (GMM)	{MM-IWU} (MM)	M
12	GMM INFORMATION (GMM)	{MM-IWU} (MM)	M
13	Service Accept (GMM)	{MM-IWU}} (MM)	M
14	Service Reject (GMM)	{MM-IWU} (MM)	M
15	ACTIVATE PDP CONTEXT ACCEPT (SM)	{CC-CONNECT} (CC)	M
16	ACTIVATE PDP CONTEXT REJECT (SM)	{CC-RELEASE-COM} (CC)	M
17	ACTIVATE SECONDARY PDP CONTEXT ACCEPT (SM)	{CC-CONNECT} (CC)	M
18	ACTIVATE SECONDARY PDP CONTEXT REJECT (SM)	{CC-RELEASE-COM} (CC)	M
19	REQUEST PDP CONTEXT ACTIVATION (SM)	{MM-IWU} (MM)	M
20	MODIFY PDP CONTEXT REQUEST (SM)	{CC-SERVICE-CHANGE} (CC)	M
21	MODIFY PDP CONTEXT ACCEPT (SM)	{CC-SERVICE-ACCEPT} (CC)	M
22	MODIFY PDP CONTEXT REJECT (SM)	{CC-SERVICE-REJECT} (CC)	M
23	DEACTIVATE PDP CONTEXT REQUEST (SM)	{CC-RELEASE-COM} (CC)	M
24	DEACTIVATE PDP CONTEXT ACCEPT (SM)	{CC-RELEASE-COM} (CC)	M
25	SM Status (SM)	{MM-IWU} (MM)	M

6.1.1 ATTACH ACCEPT (GMM) to {LOCATE ACCEPT} (MM)

Table 2

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ATTACH ACCEPT (GMM) (TS 124 008 [24] clause 9.4.2)	{LOCATE-ACCEPT} (MM) (EN 300 175-5 [5] clause 6.3.6.17)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Attach accept message identity	Message Type	8.1.3	M	
4	Attach result	IWU-TO-IWU	7.1.4	M	
5	Force to standby	IWU-TO-IWU	7.1.4	M	
6	Periodic RA update timer	IWU-TO-IWU	7.1.4	M	
7	Radio priority for SMS	IWU-TO-IWU	7.1.4	M	
8	Spare half octet	-		I	
9	Routing area identification	Location area (M)	TS 101 863-3 [11] clause 7.1.5	M	
10	P-TMSI signature	IWU-TO-IWU		M	
11	Negotiated READY timer value	IWU-TO-IWU		M	
12	Allocated P-TMSI	NWK assigned identity	TS 101 863-3 [11] clause 7.1.1	M	
13	MS identity	Portable identity	7.1.2	M	
14	GMM cause	IWU-TO-IWU	7.1.4	M	
15	T3302 value	IWU-TO-IWU	7.1.4	M	
16	Cell Notification	IWU-TO-IWU	7.1.4	M	
17	-	Use TPUI		I	
18	-	Ext h/o indicator		I	
19	-	Setup capability		I	
20	-	Duration	EN 300 175-5 [5] clause 7.7.13	C201	Lock limit="111"B; Time limits="0100"B, 1 unit = 6 minutes = 2 250 multiframes
21	-	IWU-TO-IWU		I	
22	-	Model identifier		I	
23	-	Escape to proprietary		I	
C201: The <<DURATION>> information element shall be present if periodic location registration is initiated from the PT side.					

6.1.2 ATTACH REJECT (GMM) to {LOCATE REJECT} (MM)

Table 3

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ATTACH REJECT (GMM) (TS 124 008 [24] clause 9.4.4)	{LOCATE REJECT} (EN 300 175-5 [5] clause 6.3.6.18)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Attach reject message identity	Message Type	8.1.3	M	
4	GMM cause	IWU-TO-IWU	7.1.4	M	
5	T3302 value	IWU-TO-IWU	7.1.4	M	
6	-	Reject Reason		I	
7	-	Duration		I	
8	-	Escape to proprietary		I	

6.1.3 void

6.1.4 void

6.1.5 P-TMSI REALLOCATION COMMAND (GMM) to {TEMPORARY-IDENTITY-ASSIGN} (MM)

Table 4

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	P-TMSI REALLOCATION COMMAND (GMM) (TS 124 008 [24] clause 9.4.7)	{TEMPORARY-IDENTITY-ASSIGN} (EN 300 175-5 [5] clause 6.3.6.24)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	P-TMSI reallocation command message identity	Message Type	8.1.3	M	
4	Allocated P-TMSI (Mobile identity)	NWK assigned identity	TS 101 863-3 [11] clause 7.1.1	M	
5	Routing area identification	Location area	TS 101 863-3 [11] clause 7.1.5	M	
6	Force to standby	IWU-TO-IWU	7.1.4	M	
7	Spare half octet	-		I	
8	P-TMSI signature	IWU-TO-IWU	7.1.4	M	
9	-	Portable identity		I	
10	-	Duration		I	
11	-	Network parameter		I	
12	-	IWU-TO-IWU		I	
13	-	Escape to proprietary		I	

6.1.6 AUTHENTICATION AND CIPHERING REQUEST (GMM) to {AUTHENTICATION-REQUEST} (MM)

Table 5

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	AUTHENTICATION AND CIPHERING REQUEST (GMM) (TS 124 008 [24] clause 9.4.9)	{AUTHENTICATION-REQUEST} (EN 300 175-5 [5] clause 6.3.6.9)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Authentication and ciphering request message identity	Message Type	8.1.3	M	
4	Ciphering algorithm	AUTH-TYPE	7.1.3	M	
		Cipher info	7.1.6	M	
5	IMEISV request	IWU-TO-IWU	7.1.4	M	
6	Force to standby	IWU-TO-IWU	7.1.4	M	
7	A&C reference number	IWU-TO-IWU	7.14	M	
8	Authentication parameter RAND	RAND	TS 101 863-3 [11] clause 7.1.2	M	
9	GPRS ciphering key sequence number	IWU-TO-IWU	7.1.4	C501	
10	Authentication parameter AUTN	IWU-TO-IWU	7.1.4	M	
11	-	RS		I	
12	-	Escape to proprietary		I	

C501: This IE is included if and only if the *Authentication parameter RAND* is contained in the message.

6.1.7 AUTHENTICATION AND CIPHERING REJECT (GMM) to {MM-INFO-SUGGEST} (MM)

Table 6

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	AUTHENTICATION AND CIPHERING REJECT (GMM) (TS 124 008 [24] clause 9.4.11)	{MM-INFO-SUGGEST} (EN 300 175-5 [5] clause 6.3.6.23)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Authentication and ciphering reject message identity	Message Type	8.1.3	M	
4	-	Info type (M)		-	Should indicate "authentication of PT failure"
5	-	Call Identity		I	
6	-	Fixed identity		I	
7	-	Location area		I	
8	-	NWK assigned identity		I	
9	-	Network parameter		I	
10	-	Ext h/o indicator		I	
11	-	KEY		I	
12	-	Setup capability		I	
13	-	IWU-TO-IWU		I	
14	-	Escape to proprietary		I	

6.1.8 IDENTITY REQUEST (GMM) to {IDENTITY-REQUEST} (MM)

Table 7

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	IDENTITY REQUEST (GMM) (TS 124 008 [24] clause 9.4.12)	{IDENTITY-REQUEST} (MM) (EN 300 175-5 [5] clause 6.3.6.15)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Identity request message identity	Message Type	8.1.3	M	
4	Identity type	Identity type	TS 101 863-3 [11] clause 7.1.6	M	
5	Force to standby	IWU-TO-IWU	7.1.4	M	

6.1.9 ROUTING AREA UPDATE ACCEPT (GMM) to {LOCATE-ACCEPT} (MM)

Table 8

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ROUTING AREA UPDATE ACCEPT (GMM) (TS 124 008 [24] clause 9.4.15)	{LOCATE-ACCEPT} (MM) (EN 300 175-5 [5] clause 6.3.6.17)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Routing area update accept message identity	Message Type	8.1.3	M	
4	Force to standby	IWU-TO-IWU	7.1.4	M	
5	Update result	IWU-TO-IWU	7.1.4	M	
6	Periodic RA update timer	IWU-TO-IWU	7.1.4	M	
7	Routing area identification	Location area	TS 101 863-3 [11] clause 7.1.5	M	
8	P-TMSI signature	IWU-TO-IWU	7.1.4	M	
9	Allocated P-TMSI	NWK assigned identity	TS 101 863-3 [11] clause 7.1.1	M	
10	MS identity	Portable identity		M	
11	List of Receive N-PDU Numbers	IWU-TO-IWU	7.1.4	M	
12	Negotiated READY timer value	IWU-TO-IWU	7.1.4	M	
13	GMM cause	IWU-TO-IWU	7.1.4	M	
14	T3302 value	IWU-TO-IWU	7.1.4	M	
15	Cell Notification	IWU-TO-IWU	7.1.4	M	
16	-	Use TPUI		I	
17	-	Ext h/o indicator		I	
18	-	Setup capability		I	
19	-	Duration		I	
20	-	Model identifier		I	
21	-	Escape to proprietary		I	

6.1.10 ROUTING AREA UPDATE REJECT (GMM) to {LOCATE-REJECT} (MM)

Table 9

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ROUTING AREA UPDATE REJECT (GMM) (TS 124 008 [24] clause 9.4.17)	{LOCATE-REJECT} (MM) (EN 300 175-5 [5] clause 6.3.6.18)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Skip indicator	Transaction Identifier	8.1.2	M	
3	Routing area update reject message identity	Message Type	8.1.3	M	
4	GMM cause	IWU-TO-IWU	7.1.4	M	
5	Force to standby	IWU-TO-IWU	7.1.4	M	
6	Spare half octet	-		I	
7	T3302 value	IWU-TO-IWU	7.1.4	M	
8	-	Reject Reason		I	

6.1.11 GMM STATUS (GMM) to {MM-IWU}

Table 10

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)			
1	-	Protocol Discriminator	8.1.1	-	
2	-	Transaction Identifier	8.1.2	-	
3	-	Message Type	8.1.3	-	
4	GMM STATUS (GMM) (TS 124 008 [24] clause 9.4.18)	IWU-TO-IWU	7.1.5	M	

6.1.12 GMM INFORMATION (GMM) to {IWU-INFO}

Table 11

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)			
1	-	Protocol Discriminator	8.1.1	-	
2	-	Transaction Identifier	8.1.2	-	
3	-	Message Type	8.1.3	-	
4	GMM INFORMATION (GMM) (TS 124 008 [24] clause 9.4.19)	IWU-TO-IWU	7.1.5	M	

6.1.13 Service Accept (GMM) to {IWU-INFO}

Table 12

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)			
1	-	Protocol Discriminator	8.1.1	-	
2	-	Transaction Identifier	8.1.2	-	
3	-	Message Type	8.1.3	-	
4	Service Accept (GMM) (TS 124 008 [24] clause 9.4.21)	IWU-TO-IWU	7.1.5	M	

6.1.14 Service Reject (GMM) to {MM-IWU}

Table 13

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.2.14)			
1		Protocol Discriminator	-	-	
2		Transaction Identifier	-	-	
3		Message Type	-	-	
4	Service Reject (GMM) (TS 124 008 [24] clause 9.4.22)	IWU-TO-IWU	7.1.4	M	

6.1.15 ACTIVATE PDP CONTEXT ACCEPT (SM) to {CC-CONNECT} (CC)

Table 14

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ACTIVATE PDP CONTEXT ACCEPT (ETSI TS 124 008 [24] clause 9.5.2)	{CC-CONNECT} (EN 300 175-5 [5] clause 6.3.2.6)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Activate PDP context accept message identity	Message Type	8.1.3	M	
4	Negotiated LLC SAPI	IWU-TO-IWU	7.1.4	M	
5	Negotiated QoS	IWU-TO-IWU	7.1.4	M	
6	Radio priority	IWU-TO-IWU	7.1.4	M	
7	Spare half octet	-		I	
8	PDP address	IWU-TO-IWU	7.1.4	M	
9	Protocol configuration options	IWU-TO-IWU	7.1.4	M	
10	Packet Flow Identifier	IWU-TO-IWU	7.1.4	M	

6.1.16 ACTIVATE PDP CONTEXT REJECT (SM) to {CC-RELEASE-COM} (CC)

Table 15

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ACTIVATE PDP CONTEXT REJECT (TS 124 008 [24] clause 9.5.3)	CC-RELEASE-COM (EN 300 175-5 [5] clause 6.3.2.9)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Activate PDP context reject message identity	Message Type	8.1.3	M	
4	SM cause	IWU-TO-IWU	7.1.4	M	
5	Protocol configuration options	IWU-TO-IWU	7.1.4	M	

6.1.17 ACTIVATE SECONDARY PDP CONTEXT ACCEPT (SM) to {CC-CONNECT} (CC)

Table 16

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ACTIVATE SECONDARY PDP CONTEXT ACCEPT (TS 124 008 [24] clause 9.5.5)	CC-CONNECT (EN 300 175-5 [5] clause 6.3.2.9)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Activate secondary PDP context accept message identity	Message Type	8.1.3	M	
4	Negotiated LLC SAPI	IWU-TO-IWU	7.1.4	M	
5	Negotiated QoS	IWU-TO-IWU	7.1.4	M	
6	Radio priority	IWU-TO-IWU	7.1.4	M	
7	Spare half octet	-		I	
8	Packet Flow Identifier	IWU-TO-IWU	7.1.4	M	

6.1.18 ACTIVATE SECONDARY PDP CONTEXT REJECT (SM) to {CC-RELEASE-COM} (CC)

Table 17

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	ACTIVATE SECONDARY PDP CONTEXT REJECT (TS 124 008 [24] clause 9.5.6)	CC-RELEASE-COM (EN 300 175-5 [5] clause 6.3.2.9)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Activate Secondary PDP context reject message identity	Message Type	8.1.3	M	
4	SM cause	IWU-TO-IWU	7.1.4	M	

6.1.19 REQUEST PDP CONTEXT ACTIVATION (SM) to {MM-IWU} (MM)

Table 18

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)			
1		Protocol Discriminator	-	-	
2		Transaction Identifier	-	-	
3		Message Type	-	-	
4	REQUEST PDP CONTEXT ACTIVATION (ETSI TS 124 008 [24] clause 9.5.7)	IWU-TO-IWU	7.1.5	M	

NOTE: DECT TI value 6 shall be used (EN 300 175-5 [5] clause 7.3).

6.1.20 MODIFY PDP CONTEXT REQUEST (SM) to {CC-SERVICE-CHANGE} (CC)

Table 19

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	MODIFY PDP CONTEXT REQUEST (network to MS direction) (TS 124 008 [24] clause 6.5.9)	{CC-SERVICE-CHANGE} (EN 300 175-5 [5] clause 6.3.2.10)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Modify PDP context request message identity	Message Type	8.1.3	M	
4	Radio priority	IWU-TO-IWU	7.1.4	M	
5	Spare half octet	-		I	
6	Requested LLC SAPI	IWU-TO-IWU	7.1.4	M	
7	New QoS	IWU-TO-IWU	7.1.4	M	
8	PDP address	IWU-TO-IWU	7.1.4	M	
9	Packet Flow Identifier	IWU-TO-IWU	7.1.4	M	
10	-	Service Change Info	7.1.1	-	NOTE

NOTE: The {Service Change Info} information element is generated locally by the FT-IWU.

6.1.21 MODIFY PDP CONTEXT ACCEPT (SM) to {CC-SERVICE-ACCEPT} (CC)

Table 20

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	MODIFY PDP CONTEXT ACCEPT (network to MS direction) (TS 124 008 [24] clause 9.5.9)	{CC-SERVICE-ACCEPT} (EN 300 175-5 [5] clause 6.3.2.11)			
1	Protocol Discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Modify PDP context accept message identity	Message Type	8.1.3	M	
4	-	Connection identity		I	
5	Radio priority	IWU-TO-IWU	7.1.4	M	
6	Spare half octet	-		I	
7	Requested LLC SAPI	IWU-TO-IWU	7.1.4	M	
8	New QoS	IWU-TO-IWU	7.1.4	M	
9	PDP address	IWU-TO-IWU	7.1.4	M	
10	Packet Flow Identifier	IWU-TO-IWU	7.1.4	M	

6.1.22 MODIFY PDP CONTEXT REJECT (SM) to {CC-SERVICE-REJECT} (CC)

Table 21

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	MODIFY PDP CONTEXT REJECT (TS 124 008 [24] clause 9.5.13)	{CC-SERVICE-REJECT} (EN 300 175-5 [5] clause 6.3.2.12)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Modify PDP Context Reject	Message Type	8.1.3	M	
4	SM cause	IWU-TO-IWU	7.1.4	M	
5	-	Release Reason		I	

6.1.23 DEACTIVATE PDP CONTEXT REQUEST (SM) to {CC-RELEASE-COM} (CC)

Table 22

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	DEACTIVATE PDP CONTEXT REQUEST (TS 124 008 [24] clause 9.5.14)	{CC-RELEASE} (EN 300 175-5 [5] clause 6.3.2.8)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Deactivate PDP context request message identity	Message Type	8.1.3	M	
4	SM cause	IWU-TO-IWU	7.1.4	M	
5	Tear down indicator	IWU-TO-IWU	7.1.4	M	

6.1.24 DEACTIVATE PDP CONTEXT ACCEPT (SM) to {CC-RELEASE-COM} (CC)

Table 23

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
	DEACTIVATE PDP CONTEXT ACCEPT (TS 124 008 [24] clause 9.5.15)	{CC-RELEASE-COM} (EN 300 175-5 [5] clause 6.3.2.9)			
1	Protocol discriminator	Protocol Discriminator	8.1.1	M	
2	Transaction identifier	Transaction Identifier	8.1.2	M	
3	Deactivate PDP context accept message identity	Message Type	8.1.3	M	
4	-	Release Reason		I	

6.1.25 SM Status (SM) to {IWU-INFO}

Table 24

Item No	Message coding UMTS	Message coding DECT	Ref	Map status	NOTE
		{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)			
1	-	Protocol Discriminator	8.1.1	-	
2	-	Transaction Identifier	8.1.2	-	
3	-	Message Type	8.1.3	-	
4	SM STATUS (TS 124 008 [24] clause 9.5.21)	IWU-TO-IWU	7.1.5	M	

6.2 DECT to UMTS

Table 25 lists the mapping of messages sent from the DECT portable part to the UMTS core network.

Table 25: List of mapped messages

Item No	DECT Message	UMTS Message	Map status
1	{LOCATE REQUEST}	ATTACH REQUEST (GMM)	M
2	{TEMPORARY IDENTITY ASSIGN-ACK}	ATTACH COMPLETE (GMM)	M
3	{DETACH}	DETACH REQUEST (GMM)	M
4	{TEMPORARY IDENTITY ASSIGN-REJ}	DETACH REQUEST	M
5	{TEMPORARY IDENTITY ASSIGN-ACK}	P-TMSI REALLOCATION COMPLETE (GMM)	M
6	{AUTHENTICATION-REPLY} (3)	AUTHENTICATION AND CIPHERING RESPONSE (GMM)	M
7	{AUTHENTICATION-REJECT} (3)	AUTHENTICATION AND CIPHERING FAILURE (GMM)	M
8	{IDENTITY-REPLY} (3)	IDENTITY RESPONSE (GMM)	M
9	{LOCATE-REQUEST} (3)	ROUTING AREA UPDATE REQUEST (GMM)	M
10	{TEMPORARY-IDENTITY-ASSIGN-ACK}	ROUTING AREA UPDATE COMPLETE (GMM)	M
11	{MM-IWU}	GMM STATUS (GMM)	M
12	{MM-IWU}	Service Request (GMM)	M
13	{CC-SETUP}{CC}	ACTIVATE PDP CONTEXT REQUEST (SM)	M
14	{CC-SETUP}{CC}	ACTIVATE SECONDARY PDP CONTEXT REQUEST (SM)	M
15	{CC-RELEASE-COM}{CC}	REQUEST PDP CONTEXT ACTIVATION REJECT (SM)	M
16	{CC-SERVICE-CHANGE}{CC}	MODIFY PDP CONTEXT REQUEST (SM)	M
17	{CC-SERVICE-ACCEPT}	MODIFY PDP CONTEXT ACCEPT (SM)	M
18	{CC-RELEASE-COM}{CC}	DEACTIVATE PDP CONTEXT REQUEST (SM)	M
19	{CC-RELEASE-COM}{CC}	DEACTIVATE PDP CONTEXT ACCEPT (SM)	M
20	{MM-IWU}	SM Status (SM)	M

6.2.1 {LOCATE REQUEST} to ATTACH REQUEST

Table 26

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{LOCATE REQUEST} (EN 300 175-5 [5] clause 6.3.6.19)	ATTACH REQUEST (TS 124 008 [24] clause 9.4.1)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Attach request message identity	8.2.3	M	
4	-	MS network capability		-	NOTE 1
5	-	Attach type		-	NOTE 2
6	IWU-TO-IWU	GPRS ciphering key sequence number		M	
7	IWU-TO-IWU	DRX parameter		M	
8	Portable identity	P-TMSI or IMSI (Mobile Identity)	TS 101 863-3 [11] clause 7.2.6	C2601	
9	NWK assigned identity	P-TMSI or IMSI (Mobile Identity)	TS 101 863-3 [11] clause 7.1.1	C2602	
10	Location area	Old routing area identification	TS 101 863-3 [11] clause 7.2.3	M	
11	-	MS Radio Access capability		-	NOTE 3
12	IWU-TO-IWU	Old P-TMSI signature	7.2.1	M	
13	IWU-TO-IWU	Requested READY timer value	7.2.1	M	
14	IWU-TO-IWU	TMSI status	7.2.1	M	
15	Fixed identity			I	
16	Cipher info			I	
17	Setup capability			I	
18	Terminal capability			I	
19	Network parameter			I	
20	IWU-TO-IWU			I	
21	Model identifier			I	
22	Escape to proprietary			I	
C2601: IF NOT (NWK assigned identity IE is valid) THEN M ELSE I					
C2602: IF (NWK assigned identity IE is valid) THEN M ELSE I					
NOTE 1: MS network capability information element is generated locally at the FT-IWU.					
NOTE 2: The attach type information element is generated locally at the FT-IWU.					
NOTE 3: The MS Radio Access capability information element is generated locally by the FT-IWU.					

6.2.2 {TEMPORARY IDENTITY ASSIGN-ACK} to ATTACH COMPLETE (GMM)

Table 27

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{TEMPORARY IDENTITY ASSIGN-ACK} (EN 300 175-5 [5] clause 6.3.6.25)	ATTACH COMPLETE (GMM) (TS 124 008 [24] clause 9.4.3)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Attach complete message identity	8.2.3	M	
4	Escape to proprietary	-		I	

6.2.3 {DETACH} to DETACH REQUEST (GMM)

Table 27a

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{DETACH} (EN 300 175-5 [5] clause 6.3.6.13)	DETACH REQUEST (GMM) (MS to network) (TS 124 008 [24] clause 9.4.5.2)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Detach request message identity	8.2.3	M	
4	-	Detach type		M	NOTE
5	-	Spare half octet		I	
6	Portable identity	P-TMSI	TS 101 863-3 [11] clause 7.2.6	M	
7	IWU-TO-IWU	P-TMSI signature	7.2.1	M	
8	NWK assigned identity			I	
9	Network parameter			I	
10	Escape to proprietary			I	

NOTE: The attach type information element is generated locally at the FT-IWU.

6.2.4 {TEMPORARY IDENTITY ASSIGN-REJ} to DETACH REQUEST (GMM)

Table 28

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{TEMPORARY IDENTITY ASSIGN-REJ} (EN 300 175-5 [5] clause 6.3.6.26)	DETACH REQUEST (GMM) (MS to network) (TS 124 008 [24] clause 9.4.5.2)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Detach request message identity	8.2.3	M	
4	-	Detach type		-	NOTE
5	Reject Reason	-		I	

NOTE: The attach type information element is generated locally at the FT-IWU.

6.2.5 {TEMPORARY IDENTITY ASSIGN-ACK} to P-TMSI REALLOCATION COMPLETE (GMM)

Table 29

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{TEMPORARY IDENTITY ASSIGN-ACK} (EN 300 175-5 [5] clause 6.3.6.25)	P-TMSI REALLOCATION COMPLETE (GMM) (TS 124 008 [24] clause 9.4.8)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	P-TMSI reallocation complete message identity	8.2.3	M	
4	Escape to proprietary	-		I	

6.2.6 {AUTHENTICATION-REPLY} to AUTHENTICATION AND CIPHERING RESPONSE (GMM)

Table 30

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{AUTHENTICATION-REPLY} (EN 300 175-5 [5] clause 6.3.6.8)	AUTHENTICATION AND CIPHERING RESPONSE (GMM) (TS 124 008 [24] clause 9.4.10)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Authentication and ciphering response message identity	8.2.3	M	
4	IWU-TO-IWU	A&C reference number	7.2.1	M	
5	-	Spare half octet		I	
6	RES	Authentication parameter Response	TS 101 863-3 [11] clause 7.2.5	M	
		Authentication Response parameter (extension)	TS 101 863-3 [11] clause 7.2.16	M	
7	IWU-TO-IWU	IMEISV		M	
8	RS			I	
9	ZAP field			I	
10	Service class			I	
11	Key			I	
12	Escape to proprietary			I	

6.2.7 {AUTHENTICATION-REJECT} to AUTHENTICATION AND CIPHERING FAILURE (GMM)

Table 31

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{AUTHENTICATION-REJECT} (EN 300 175-5 [5] clause 6.3.6.7)	AUTHENTICATION AND CIPHERING FAILURE (GMM) (TS 124 008 [24] clause 9.4.10a)			
1	Protocol Discriminator	Mobility management Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip Indicator	8.2.2	M	
3	Message Type	Authentication and Ciphering Failure Message Type	8.2.3	M	
4	IWU-TO-IWU	GMM Cause	7.2.1	M	
5	IWU-TO-IWU	Authentication Failure parameter	7.2.1	M	
7	Repeat Indicator	-		I	
8	AUTH-TYPE	-		I	
9	Reject Reason	-		I	
10	Authentication Reject Parameter	-		I	
11	Escape to proprietary	-		I	

6.2.8 {IDENTITY-REPLY} to IDENTITY RESPONSE (GMM)

Table 31a

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{IDENTITY-REPLY}(MM) (EN 300 175-5 [5] clause 6.3.6.14)	IDENTITY RESPONSE (GMM) (TS 124 008 [24] clause 9.4.13)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Identity response message identity	8.2.3	M	
4	Portable Identity	Mobile identity	TS 101 863-3 [11] clause 7.2.3	M	

6.2.9 {LOCATE-REQUEST} to ROUTING AREA UPDATE REQUEST (GMM)

Table 32

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{LOCATE-REQUEST} (EN 300 175-5 [5] clause 6.3.6.19)	ROUTING AREA UPDATE REQUEST (GMM) (TS 124 008 [24] clause 9.4.14)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Routing area update request message identity	8.2.3	M	
4	IWU-TO-IWU	Update type (TS 124 008 [24] 10.5.5.18)	7.2.1	M	
5	IWU-TO-IWU	GPRS ciphering key sequence number	7.2.1	M	
6	Location area	Old routing area identification	TS 101 863-3 [11] clause 7.1.5	M	
7	-	MS Radio Access capability		-	NOTE 1
8	IWU-TO-IWU	Old P-TMSI signature	7.2.1	M	
9	IWU-TO-IWU	Requested READY timer value	7.2.1	M	
10	IWU-TO-IWU	DRX parameter	7.2.1	M	
11	IWU-TO-IWU	TMSI status	7.2.1	M	
12	NWK assigned identity	P-TMSI	TS 101 863-3 [11] clause 7.2.2	M	
13	-	MS network capability		-	NOTE 2
14	Portable identity	-		I	
15	Fixed identity	-		I	
16	Cipher info	-		I	
17	Setup capability	-		I	
18	Terminal capability	-		I	
19	Network parameter	-		I	
20	IWU-TO-IWU	-		I	
21	Model identifier	-		I	
22	Escape to proprietary	-		I	

NOTE 1: The MS radio Access capability information element is generated locally in the FT-IWU.

NOTE 2: The MS network capability information element is generated locally in the FT-IWU.

6.2.10 {TEMPORARY-IDENTITY-ASSIGN-ACK} to ROUTING AREA UPDATE COMPLETE (GMM)

Table 33

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{TEMPORARY-IDENTITY-ASSIGN-ACK} (EN 300 175-5 [5] clause 6.3.6.25)	ROUTING AREA UPDATE COMPLETE (GMM) (TS 124 008 [24] clause 9.4.16)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Skip indicator	8.2.2	M	
3	Message Type	Routing area update complete message identity	8.2.3	M	
4	IWU-TO-IWU	List of Receive N-PDU Numbers	7.2.1	M	
5	Escape to proprietary	-		I	

6.2.11 {MM-IWU} to GMM STATUS (GMM)

Table 34

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)				
1	Protocol Discriminator	-		-	
2	Transaction Identifier	-		-	
3	Message Type	-		-	
4	IWU-TO-IWU	GMM STATUS (GMM) (TS 124 008 [24] clause 9.4.18)	7.2.4	M	

6.2.12 {MM-IWU} to Service Request (GMM)

Table 35

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)				
1	Protocol Discriminator	-	-	-	
2	Transaction Identifier	-	-	-	
3	Message Type	-	-	-	
4	IWU-TO-IWU	Service Request (GMM) (TS 124 008 [24] clause 9.4.20)	7.2.4	M	

6.2.13 {CC-SETUP}{CC} to ACTIVATE PDP CONTEXT REQUEST (SM)

Table 36

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-SETUP} (EN 300 175-5 [5] clause 6.3.2.1)	ACTIVATE PDP CONTEXT REQUEST (TS 124 008 [24] clause 9.5.1)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Transaction identifier	8.2.2	C3602	
3	Message Type	Activate PDP context request message identity	8.2.3	M	
4	Portable identity	-		I	
5	Fixed identity	-		I	
6	NWK assigned identity	-		I	
7	Basic service	-		I	
8	-	Requested NSAPI (Network service access point identifier)		I	NOTE 1
9	-	Requested LLC SAPI		I	NOTE 2
10	IWU-TO-IWU	Transaction identifier	7.2.1 TS 124 008 [24] clause 10.5.6.7 (Linked TI)	C3601	
11	IWU-TO-IWU	Requested QoS	7.2.1	M	
12	IWU-TO-IWU	Requested PDP address	7.2.1	M	
13	IWU-TO-IWU	Access Point Name (APN)	7.2.1	M	
14	IWU-TO-IWU	Protocol configuration options	7.2.1	M	
C3601: IF (IWU-TO-IWU information element containing Transaction identifier is present THEN M ELSE I.					
C3602: IF NOT C3601 THEN M ELSE I					
NOTE 1: NSAPI shall be dynamically allocated by FT-IWU, see TS 124 065 [33] clause 6.1 and TS 124 008 [24] clause 6.1.3.1.1.					
NOTE 2: LLC SAPI shall be assigned by FT-IWU, see TS 124 008 [24] clause 10.5.6.9 and TS 144 064 [31] clause 6.2.3.					

6.2.14 {CC-SETUP}{CC} to ACTIVATE SECONDARY PDP CONTEXT REQUEST (SM)

Table 36a

	{CC-SETUP} (EN 300 175-5 [5] clause 6.3.2.1)
1	Protocol Discriminator
2	Transaction Identifier
3	Message Type
4	Portable identity
5	Fixed identity
6	NWK assigned identity
7	Basic service
8	-
9	-
10	IWU-TO-IWU

Table 37

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
		ACTIVATE SECONDARY PDP CONTEXT REQUEST (TS 124 008 [24] clause 9.5.4)			
		Protocol discriminator	8.2.1	M	
		Transaction identifier	8.2.2	M	
		Activate secondary PDP context request message identity	8.2.3	M	
		-		I	
		-		I	
		-		I	
		-		I	
		Requested NSAPI (Network service access point identifier)		I	NOTE 1
		Requested LLC SAPI	7.2.1	I	NOTE 2
		Requested QoS	7.2.1	M	
11	IWU-TO-IWU	Linked TI	7.2.1	M	
12	IWU-TO-IWU	Traffic Flow Template (TFT)	7.2.1	M	
NOTE 1: NSAPI shall be dynamically allocated by FT-IWU, see TS 124 065 [32] clause 6.1 and TS 124 008 [24] clause 6.1.3.1.1.					
NOTE 2: LLC SAPI shall be assigned by FT-IWU, see TS 124 008 [24] clause 10.5.6.9 and TS 144 064 [31] clause 6.2.3.					

6.2.15 {CC-RELEASE-COM}(CC) to REQUEST PDP CONTEXT ACTIVATION REJECT (SM)

Table 38

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-RELEASE-COM} (EN 300 175-5 [5] clause 9.3.2.9)	ACTIVATE PDP CONTEXT REJECT (TS 124 008 [24] clause 9.5.3)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	IWU-TO-IWU	Transaction identifier	7.2.1	M	
3	Message Type	Activate PDP context reject message identity	8.2.3	M	
4	IWU-TO-IWU	SM cause	7.2.1	M	
5	IWU-TO-IWU	Protocol configuration options	7.2.1	M	

6.2.16 {CC-SERVICE-CHANGE}(CC) to MODIFY PDP CONTEXT REQUEST (SM)

Table 38a

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-SERVICE-CHANGE} (EN 300 175-5 [5] clause 6.3.2.10)	MODIFY PDP CONTEXT REQUEST (MS to network direction) (TS 124 008 [24] clause 9.5.10)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Transaction identifier	8.2.2	M	
3	Message Type	Modify PDP context request message identity	8.2.3	M	
4	IWU-TO-IWU	Requested LLC SAPI	7.2.1	M	
5	IWU-TO-IWU	Requested new QoS	7.2.1	M	
6	IWU-TO-IWU	New TFT	7.2.1	M	
7	Portable identity	-		I	
8	Service Change Info	-		I	
9	Connection Attributes	-		I	
10	Connection identity	-		I	

6.2.17 {CC-SERVICE-ACCEPT} to MODIFY PDP CONTEXT ACCEPT (SM)

Table 39

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-SERVICE-ACCEPT} (EN 300 175-5 [5] clause 6.3.2.11)	MODIFY PDP CONTEXT ACCEPT (MS to network direction) (TS 124 008 [24] clause 9.5.11)			
1	Protocol Discriminator	Protocol Discriminator	8.2.1	M	
2	Transaction Identifier	Transaction identifier	8.2.2	M	
3	Message Type	Modify PDP context accept message identity	8.2.3	M	
4	Connection identity	-		I	

6.2.18 {CC-RELEASE}(CC) to DEACTIVATE PDP CONTEXT REQUEST (SM)

Table 40

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-RELEASE} (EN 300 175-5 [5] clause 6.3.2.8)	DEACTIVATE PDP CONTEXT REQUEST (TS 124 008 [24] clause 9.5.14)			
	Protocol Discriminator	Protocol discriminator	8.2.1	M	
	Transaction Identifier	Transaction identifier	8.2.2	M	
3	Message Type	Deactivate PDP context accept message identity	8.2.3	M	
	IWU-TO-IWU	SM cause	7.2.1	M	
1	IWU-TO-IWU	Tear down indicator	7.2.1	M	
2	Release Reason	-		I	
7	Repeat indicator (see note)	-		I	
8	Facility	-		I	
9	Repeat indicator (see note)	-		I	
10	Progress indicator	-		I	
11	"Display"	-		I	
12	Feature Indicate	-		I	
13	Repeat indicator (see note)	-		I	
14	IWU-TO-IWU	-		I	
15	IWU-PACKET	-		I	
16	Escape to proprietary	-		I	

6.2.19 {CC-RELEASE-COM}(CC) to DEACTIVATE PDP CONTEXT ACCEPT (SM)

Table 41

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{CC-RELEASE-COM} (EN 300 175-5 [5] clause 6.3.2.9)	DEACTIVATE PDP CONTEXT ACCEPT (TS 124 008 [24] clause 9.5.15)			
1	Protocol Discriminator	Protocol discriminator	8.2.1	M	
2	Transaction Identifier	Transaction identifier	8.2.2	M	
3	Message Type	Deactivate PDP context accept message identity	8.2.3	M	
4	Release Reason	-		I	

6.2.20 {MM-IWU} to SM Status (SM)

Table 42

Item No	Message coding DECT	Message coding UMTS	Ref	Map status	NOTE
	{MM-IWU} (EN 300 175-5 [5] clause 6.3.6.27)				
1	Protocol Discriminator		-	-	
2	Transaction Identifier		-	-	
3	Message Type		-	-	
4	IWU-TO-IWU	SM STATUS (TS 124 008 [24] clause 9.5.21)	7.2.4	M	

7 Information element mappings

7.1 UMTS to DECT

7.1.1 Service Change Info

The {Service Change Info} information element is generated locally by the FT-IWU.

Table 43

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
	(Void)	Service Change Info (EN 300 175-5 [5] clause 7.7.38)			
1		ID for Service Change Info	8.1.1	-	
2		Length of contents	8.1.2	-	
3		Coding Standard		-	Set to "0 0"B DECT standard coding
4		Master		-	Set to "0"B Initiating side is master
5		Change Mode		-	Set to "1 1 0 0"B IWU-attribute change

7.1.2 Mobile identity - Portable identity

Table 44

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
	Mobile identity (TS 124 008 [24] clause 10.5.1.4)	Portable identity (EN 300 175-5 [5] clause 7.7.30)		M	
1	Mobile identity IEI	ID for Portable identity	8.1.1	M	
2	Length of contents	Length of contents	8.1.2	M	
3	Odd/even indication		-	I	
4	-	Length of identity value	-	M	NOTE
5	Type of identity	Type	8.1.6	M	
6	Type of identity	Portable User Type	8.1.7	M	
7	Identity digits	Identity value	8.1.8	M	
NOTE: The "Length of identity value" field is set by the FT-IWU according to the number of octets contained in the "identity value" field.					

7.1.3 Ciphering algorithm - {AUTH-TYPE}

Table 45

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
	Ciphering algorithm (TS 124 008 [24] clause 10.5.5.3)	Portable identity (EN 300 175-5 [5] clause 7.7.4)		M	
1	Ciphering algorithm IEI	Authentication type IEI	8.1.1	M	
2	Spare			I	
3	-	Length of contents	8.1.2	M	
4	-	Authentication algorithm identifier		-	set to "00100000"B (UMTS authentication algorithm)
5	-	Authentication key type		-	set to "0001"B (User authentication key)
6	-	Authentication key number		-	set to "0000"B (Key associated to the active IPUI)
7	-	INC bit		-	set to "0"B (leave value of the ZAP field unchanged)
8	-	TXC		-	set to "0"B (do not include the derived cipher key in the {AUTHENTICATION-REPLY} message)
9	-	UPC bit		-	set to "1"B (Store cipher key)

7.1.4 (UMTS IE) - {IWU-TO-IWU}

The table below describes the mapping of various UMTS/GPRS information elements to DECT {IWU-TO-IWU} information elements.

Table 46

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
		IWU-TO-IWU (EN 300 175-5 [5] clause 7.7.23)			
1	-	ID for IWU-TO-IWU	8.1.1	-	
2	-	Length of contents	8.1.2	-	
3	-	S/R		-	Set to "1"B Transmission of message
4	-	Protocol discriminator (PD)			Set to "0 1 0 0 1 0"B UMTS/GPRS information element(s)
5	UMTS IE	IWU-TO-IWU Information		M	Discriminator type is set to "0 0 0 0 0 0"B Unspecified

7.1.5 (UMTS message) - {IWU-TO-IWU}

The table below describes the mapping of UMTS/GPRS messages to DECT {IWU-TO-IWU} information elements.

Table 47

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
		IWU-TO-IWU (EN 300 175-5 [5] clause 7.7.23)			
1	-	ID for IWU-TO-IWU	8.1.1	-	
2	-	Length of contents	8.1.2	-	
3	-	S/R		-	Set to "1"B Transmission of message
4	-	Protocol discriminator (PD)			Set to "0 1 0 0 1 1"B UMTS/GPRS message
5	UMTS message	IWU-TO-IWU Information		M	Discriminator type is set to "0 0 0 0 0 0"B Unspecified

7.1.6 Cipherng algorithm - Cipher info

Table 48

Item No	Information element coding UMTS	Information element coding DECT	Ref	Map status	NOTE
	Cipherng algorithm (TS 124 008 [24] clause 10.5.5.3)	Cipher info (EN 300 175-5 [5] clause 7.7.10)			
1	Cipherng algorithm IEI	ID for Cipher info	8.1.1	M	
2	-	Length of contents	8.1.2	M	
	-	Y/N-Bit		-	Set to "1"B (enable cipherng)
3	Type of algorithm	Cipher algorithm identifier	8.1.9	M	
5	-	Cipher key type		-	Set to "1001"B (Derived cipher key)
6	-	Cipher key number		-	Set to "0000"B

7.2 DECT to UMTS

7.2.1 {IWU-TO-IWU} - (UMTS IE)

The table below describes the mapping of DECT <<IWU-TO-IWU>> information elements to UMTS/GPRS information elements.

Table 49

Item No	Information element coding DECT	Information element coding UMTS	Ref	Map status	NOTE
	IWU-TO-IWU (EN 300 175-5 [5] clause 7.7.23)				
1	ID for IWU-TO-IWU	-	8.2.1	-	
2	Length of contents	-	8.2.2	-	
3	S/R	-		-	Set to "1"B Transmission of message
4	Protocol discriminator (PD)	-			Set to "0 1 0 0 1 0"B UMTS/GPRS elements
5	IWU-TO-IWU Information	UMTS IE		M	Discriminator type is set to "0 0 0 0 0 0"B Unspecified

7.2.2 MS network capability

The <<MS network capability>> information element is generated locally by the FT-IWU.

Table 50

Item No	Information element coding DECT	Information element coding UMTS	Ref	Map status	NOTE
	(Void)	MS network capability TS 124 008 [24] clause 10.5.5.12			
1		MS network capability IEI	8.1.1	-	
2		Length of MS network capability contents	8.1.2	-	
3		SM capabilities via dedicated channels		-	set to "0"B
4		SM capabilities via GPRS channels		-	NOTE
5		UCS2 support		-	set to "0"B
6		SoLSA Capability		-	set to "0"B
7		Revision level indicator		-	set to "1"B
8		PFC feature mode		-	set to "0"B
9		Extended GEA		-	set to "0 0 0 0 0 0"B
10		LCS VA capability		-	set to "0"B
11		Spare bits		-	set to (null)
NOTE: Shall be set according to the <<terminal capabilities>> information element received from the PT. If SM are supported by the portable field shall be set to "1"B else "0"B.					

7.2.3 MS Access capability

The <<MS Access capability>> information element is generated locally by the FT-IWU.

Table 51

Item No	Information element coding DECT	Information element coding UMTS	Ref	Map status	NOTE
	(Void)	MS Access capability TS 124 008 [24] clause 10.5.5.12a			
1		MS network capability IEI	8.1.1	-	
2		Length of MS network capability contents	8.1.2	-	
3		Access Technology Type			set to "1 1 1 1"B
		RF Power Capability			set to "0 0 0"B
		8PSK Power Capability			set to "0 0 0"B
4		A5 bits			set to "0 0 0 0 0 0"B
5		ES IND			set to "0"B
6		PS			set to "0"B
7		VGCS			set to "0"B
8		VBS			set to "0"B
9		COMPACT Interference Measurement Capability			set to "0"B
10		Revision Level Indicator			set to "1"B
11		UMTS FDD Radio Access Technology Capability			set to "0"B
12		UMTS 3.84 Mcps TDD Radio Access Technology Capability			set to "0"B
13		CDMA 2000 Radio Access Technology Capability			set to "0"B
14		UMTS 1.28 Mcps TDD Radio Access Technology Capability			set to "0"B
15		MS_EXT_UTBF			set to "0"B
16		HSCSD multislot class			set to "0"B
17		GPRS multislot class			set to "0"B
18		SMS_VALUE			set to "0 0 0 0"B
19		SM_VALUE			set to "0 0 0 0"B
20		ECSD multislot class			set to "0"B
21		EGPRS multislot class			set to "0"B
22		DTM GPRS Multi Slot Sub- Class			set to "0"B
23		DTM EGPRS Multi Slot Sub-Class			set to "0"B

7.2.4 {IWU-TO-IWU} - (UMTS message)

Table 52 describes the mapping of DECT <<IWU-TO-IWU>> information elements to UMTS/GPRS messages.

Table 52

Item No	Information element coding DECT	Information element coding UMTS	Ref	Map status	NOTE
	IWU-TO-IWU (EN 300 175-5 [5] clause 7.7.23)				
1	ID for IWU-TO-IWU	-	8.2.1	-	
2	Length of contents	-	8.2.2	-	
3	S/R	-		-	Set to "1"B Transmission of message
4	Protocol discriminator (PD)	-			Set to "0 1 0 0 1 0"B UMTS/GPRS elements
5	IWU-TO-IWU Information	UMTS IE		M	Discriminator type is set to "0 0 0 0 0 0"B Unspecified

7.2.5 {IWU-TO-IWU} - (Transaction Identifier)

Table 53 describes the mapping of a DECT <<IWU-TO-IWU>> information element to a UMTS Transaction identifier.

Table 53

Item No	Information element coding DECT	Information element coding UMTS	Ref	Map status	NOTE
	IWU-TO-IWU (EN 300 175-5 [5] clause 7.7.23)				
1	ID for IWU-TO-IWU	-	8.2.1	-	
2	Length of contents	-	8.2.2	-	
3	S/R	-		-	Set to "1"B Transmission of message
4	Protocol discriminator (PD)	-			Set to "0 1 0 0 1 0"B UMTS/GPRS elements
5	IWU-TO-IWU Information	Transaction Identifier	TS 124 007 [23] clause 11.2.3.1.3	M	NOTE
NOTE: The <<IWU-TO-IWU>> Information element should be mapped transparently to the <<Transaction Identifier>>.					

8 Fields in information element coding

If a note contains the phrase "Value is mapped transparently", this implies that the FT-IWU shall process the information element/field value in a way which the most significant bits or digits versus least significant are kept in alignment on both sides of the FT-IWU.

8.1 UMTS to DECT

8.1.1 Protocol discriminator - protocol discriminator

Table 54

Item No	Field(s) coding UMTS	Field(s) coding DECT	Reference	Map status	NOTE
	Protocol discriminator (TS 124 007 [23] clause 11.2.3.1.1)	Protocol discriminator (EN 300 175-5 [5] clause 7.2)			
1	"0000"B (group call control)	-		I	
2	"0001"B (broadcast call control)	-		I	
3	"0010"B (PDSS1)	-		I	
4	"0011"B (call control; call related SS messages)	-		I	
5	"0100"B (GPRS Transparent Transport Protocol (GTP))	-		I	
6	"0101"B (mobility management messages (MM))	-		I	
7	"0110"B (radio resources management messages)	-		I	
8	"1000"B (GPRS mobility management messages (GMM))	"0101"B (Mobility Management messages (MM))		M	
9	"1001"B (SMS messages)	-		I	
10	"1010"B (GPRS session management messages)	"0011"B (Call Control (CC) messages)		M	
11	"1011"B (non call related SS messages)	"0100"B Call Independent Supplementary Services (CISS) messages		I	
12	"1100"B (Location services)	-		I	
13	"1110"B (reserved for extension of the PD to one octet length)	-		I	
14	"1111"B (reserved for tests procedures)	-		I	
15	-	"0000"B (Link Control Entity (LCE) messages)		I	
16	-	"0110"B (ConnectionLess Message Service (CLMS) messages)		I	
17	-	"0111"B (Connection Oriented Message Service (COMS) messages)		I	

8.1.2 Transaction identifier - transaction identifier

See TS 101 863-3 [11] clause 8.1.2. Due to limitations of transaction identifier values in DECT (CI clause 7.3) a mapping table in the FT-IWU shall map valid UMTS transaction identifiers to valid DECT transaction identifiers. The allocation of new transaction identifier values should be according to TS 124 007 [23] clause 11.2.3.1.3 for UMTS transaction identifiers and according to EN 300 175-5 [5] clause 7.3 for DECT transaction identifiers.

8.1.3 Message type - message type

The messages mapping is dependent on which procedure and state the FT is in. The table, which refers to this clause, shows which message types shall be mapped with each other.

The N (SD) bits in the UMTS network side shall be incremented (independent of DECT) or set to a default value according to the rules as defined in TS 124 007 [23] clause 11.2.3.2.2 every time the FP IWU sends a message to the CN. The N (SD) bits are not mapped to the DECT air interface.

8.1.4 Id for info element (IEI) - id for info element

See TS 101 863-3 [11] clause 8.1.4.

8.1.5 Length of contents - length of contents

See TS 101 863-3 [11] clause 8.1.5.

8.1.6 Type of identity - Type (Mobile, portable identity)

Table 55

Item No	Field(s) coding UMTS	Field(s) coding DECT	Reference	Map status	NOTE
	Type of identity (TS 124 008 [24] clause 10.5.1.4)	Type (EN 300 175-5 [5] clause 7.7.30)			
1	"001"B (IMSI)	"0000000"B (Temporary Portable User Identity (TPUI))		M	

8.1.7 Type of identity - Portable User Type (Mobile, portable identity)

Table 56

Item No	Field(s) coding UMTS	Field(s) coding DECT	Reference	Map status	NOTE
	Type of identity (TS 124 008 [24] clause 10.5.1.4)	Portable user type (EN 300 175-5 [5] clause 7.7.30)			
1	"001"B (IMSI)	"0100"B		M	

8.1.8 Identity digits, Identity value (Mobile identity, portable identity)

Table 57

Item No	Field(s) coding UMTS	Field(s) coding DECT	Reference	Map status	NOTE
	Identity value (TS 124 008 [24] clause 10.5.1.4)	Identity value (EN 300 175-5 [5] clause 7.7.30)			
1	Maximum of 15 BCD coded digits	Maximum of 60 bits representing a maximum of 15 BCD coded digits		M	Value is mapped transparently

8.1.9 Type of algorithm, Cipher algorithm identifier (Ciphering algorithm, Cipher info)

Table 58

Item No	Field(s) coding UMTS	Field(s) coding DECT	Reference	Map status	NOTE
	Type of algorithm (TS 124 008 [24] clause 10.5.5.3)	Cipher algorithm identifier (EN 300 175-5 [5] clause 7.7.10)			
1	"0 0 0" B ciphering not used	"0 1 0 1 0 0 0"B GPRS ciphering not used		M	
2	"0 0 1" B GPRS Encryption Algorithm GEA/1	"0 1 0 1 0 0 1"B GPRS encryption algorithm GEA/1		M	
3	"0 1 0" B GPRS Encryption Algorithm GEA/2	"0 1 0 1 0 1 0"B GPRS encryption algorithm GEA/2		M	
4	"0 1 1" B GPRS Encryption Algorithm GEA/3	"0 1 0 1 0 1 1"B GPRS encryption algorithm GEA/3		M	
5	"1 0 0" B GPRS Encryption Algorithm GEA/4	"0 1 0 1 1 0 0"B GPRS encryption algorithm GEA/4		M	
6	"1 0 1" B GPRS Encryption Algorithm GEA/5	"0 1 0 1 1 0 1"B GPRS encryption algorithm GEA/5		M	
7	"1 1 0" B GPRS Encryption Algorithm GEA/6	"0 1 0 1 1 1 0"B GPRS encryption algorithm GEA/6		M	
8	"1 1 1" B GPRS Encryption Algorithm GEA/7	"0 1 0 1 1 1 1"B GPRS encryption algorithm GEA/7		M	

8.2 DECT to UMTS

8.2.1 Protocol discriminator - protocol discriminator

See clause 8.1.1.

8.2.2 Transaction identifier - transaction identifier

See clause 8.1.2.

8.2.3 Message type - message type

See clause 8.1.3.

8.2.4 Id for info element - id for info element (IEI)

See clause 8.1.4.

8.2.5 Length of contents - length of contents

See clause 8.1.5.

9 PP-IWU Reference Configuration

Figure 32 shows the reference configuration for the Portable Part Interworking Unit (PP-IWU).

The portable part interworking unit includes a Terminal Rate Adaption Function (TAF) interfacing to the Terminal Equipment via the reference point R. In terms of UMTS (TS 127 060 [28]) this entity is referred to as Mobile Equipment (ME) and as User Equipment when the USIM and Terminal Equipment are also included.

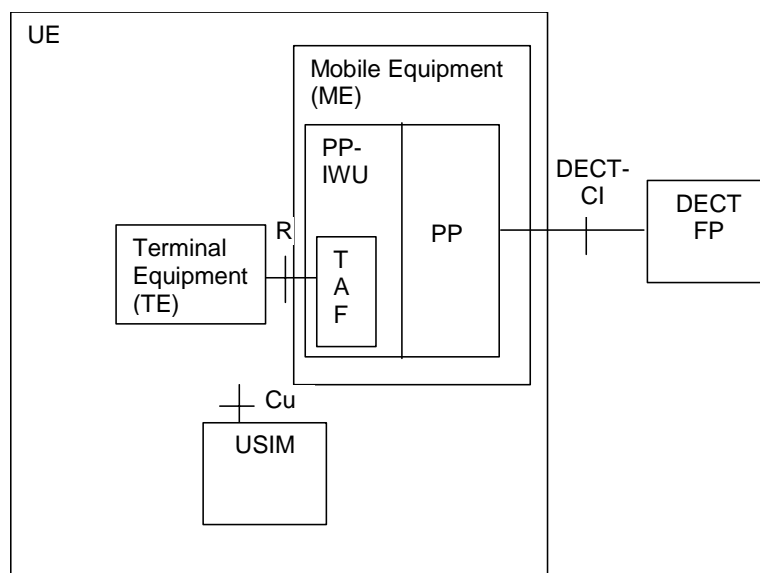


Figure 34: PP-IWU reference configuration

The PP-IWU shall fulfil the requirements for UMTS networks of TS 127 060 [28].

The TAF of the PP-IWU shall support GPRS AT commands for controlling Mobile Equipment (ME) functions and UMTS network services from a Terminal Equipment (TE) through Terminal Adaptor (TA) according to TS 127 007 [26] clause 10.

In case of multiplexing of simultaneous sessions over a normal serial asynchronous interface this shall be done as defined in ETSI TS 127 010 [27].

10 Profile requirements

The tables in the following clauses are derived from the EN 301 649 [16]. Only the status of the fields and specific values different to DPRS EN 301 649 [16] are indicated.

A terminal that claims being compliant to this profile shall be capable of indicating and providing the indicated support to the application(s) as defined in tables 59 and 60.

Table 59: General Class and Service support

Item	Name of service	Reference	Support status	
			PT	FT
DPRS-G.1	DPRS Class 1	3.1, 4.1 [30]	I	I
DPRS-G.2	DPRS Class 2	3.1, 4.1 [30]	M	M
DPRS-G.3	Frame Relay (FREL)	Annex B [30]	M	M
DPRS-G.4	Character stream	Annex C [30]	I	I

Table 60: General Service/Interworking support

Service	Interworking	Ref.	Status	
			PT	FT
DPRS-G.3, Frame Relay (FREL)		Annex B [30]	M	M
	Ethernet	B.4 [30]	I	I
	Token Ring	B.5 [30]	I	I
	IP	B.6 [30]	M	M
	PPP	B.7 [30]	M	M
DPRS-G.4, Character stream		Annex C [30]	I	I
	V.24	C.4 [30]	I	I

10.1 Terminal capability indication

The contents of the <<Terminal Capability>> information elements shall be based on the requirements of DPRS EN 301 649 [16], clause 12.3 and on EN 300 175-5 [5] clause 7.7.41 for information elements not covered by DPRS.

Table 61: Values used within the <<TERMINAL CAPABILITY>> information element

Information element	Field within the information element	Standard values within the field/information element	Normative action/comment
<<Terminal capability>>			
	<ext4>	0	
	<Profile indicator_1>	"x1xxxx"B	OUT OF SCOPE (DPRS Stream support)
	<ext4a>	0	
	<Profile indicator_2>	"xxxxx1"B	MANDATORY (DPRS FREL support)
	<ext4b>	0	
	<Profile indicator_3>	"x1xxxx"B	OUT OF SCOPE (Ethernet support)
		"1xxxxx"B	OUT OF SCOPE (Token Ring support)
	<ext4c>	0	
	<Profile indicator_4>	"xxxxx1"B	MANDATORY (IP support)
		"xxxxx1x"B	MANDATORY (PPP support)
		"xxx1xx"B	OUT OF SCOPE (V.24 support)
	<ext4e>		
	<Profile indicator_6>	"xxxxx1"B	MANDATORY (DECT/UMTS interworking profile supported)
		"xxxxx1x"B	MANDATORY (DECT/UMTS interworking - GPRS services supported)

10.2 Call Resources/Parameters negotiation

Table 62: Values used within the {CC-SETUP} message

Information element	Field within the information element	Standard values within the field/information element	Normative action/comment
<<IWU attributes>>			
	<Coding standard>	01	Profile defined coding
	<Profile>	00000 00001	MANDATORY (FREL support) OUT OF SCOPE (Stream support)

10.3 IWU-attributes change

Table 63: Values used within the {CC-SERVICE-CHANGE} message

Information element	Field within the information element	Standard values within the field/information element	Normative action/comment
<<IWU attributes>>			
	<Profile>	00001	OUT OF SCOPE (Stream support)
		00000	MANDATORY (FREL support)
	<Profile Subtype>	0000	OUT OF SCOPE (Ethernet (WLAN))
		1000	OUT OF SCOPE (Interworking to V.24 circuits (RS232))
		0001	OUT OF SCOPE (ISO 8802-5 (clause B.5 [16]))
		0010	MANDATORY (Internet Protocol (IP) (clause B.6 [16]) (IETF RFC 791))
		0100	MANDATORY (Point-to-Point Protocol (clause B.7 [16]) (IETF RFC 1661))

10.4 Collective and Group Ringing

Table 64: Values used within the {LCE-REQUEST-PAGE} message

Information element	Field within the information element	Standard values within the field/information element	Normative action/comment
	<IWU identification>	0001	OUT OF SCOPE (Ethernet)
		0010	OUT OF SCOPE (Token Ring)
		0011	MANDATORY (IP)
		0100	MANDATORY (PPP)
		0101	OUT OF SCOPE (V.24)

10.5 Broadcast attributes management

Table 65: Extended Higher Layer Capabilities interpretation by the PP

Bit Number	Attribute	Value	NOTE
a29	Ethernet	x	OUT OF SCOPE
a30	Token Ring	x	OUT OF SCOPE
a31	IP	1	MANDATORY
a32	PPP	1	MANDATORY
a33	V.24	x	OUT OF SCOPE
a45	DPRS Stream support	x	OUT OF SCOPE
a46	DPRS FREL support	1	MANDATORY

Annex A (informative): Possible scenarios

This informative appendix describes possible scenarios for DPRS/GPRS applications.

A.1 Scenario data only

The realization of a wireless IP using DPRS/GPRS interworking is illustrated in figure 35.

The use of UMTS mobility management enables also Cordless Data Terminal Mobility between DPRS/GPRS systems as well as between DECT/GPRS and GPRS.

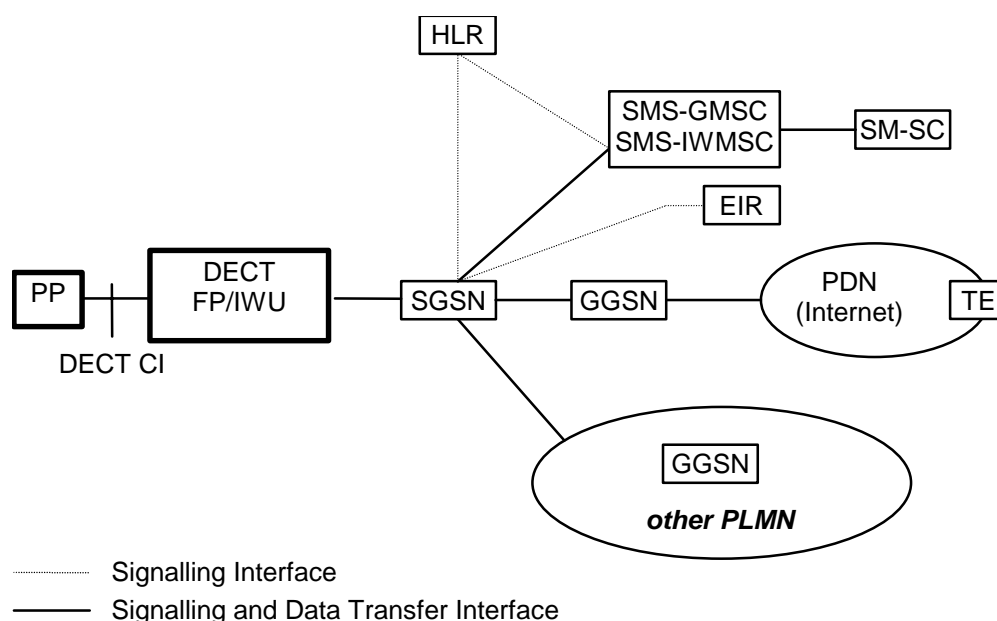


Figure 35: Logical architecture for a cordless data system based on DPRS/GPRS interworking

A.2 Scenario multi-connection

Cordless Data concepts are not restricted to data services only since there are other radio technologies that offer higher data rates for RLAN applications. Instead the main driver is cordless systems that can simultaneously handle both speech and data communication and that can be connected to several different networks at the same time. The routing of traffic to different networks can be based on UMTS or DECT identities and handled in the (private) DECT environment.

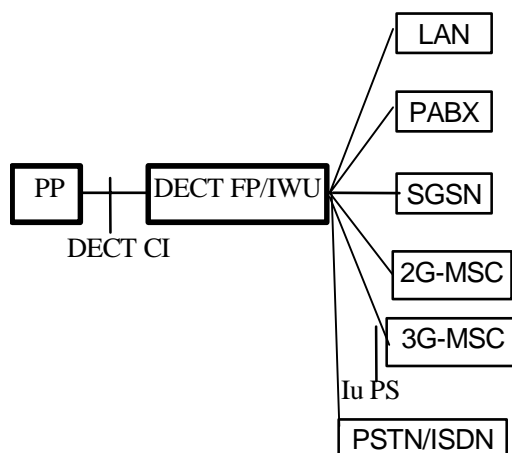


Figure 36: Multi-connection of a DECT system for integrated speech and data services to different networks

A.3 Scenario cordless and mobile environments

Integration of cordless and mobile environments, e.g. integration of a cordless home or office environment with the public mobile environment, means possibility for the user to access the same services in both environments. I.e.

- availability for incoming UMTS calls (and SMSs) also in DECT environment;
- access to PABX services in UMTS environment;
- access to packet based data networks (internet and intranet) in DECT environment;
- access to home data networks (intranet) in UMTS environment.

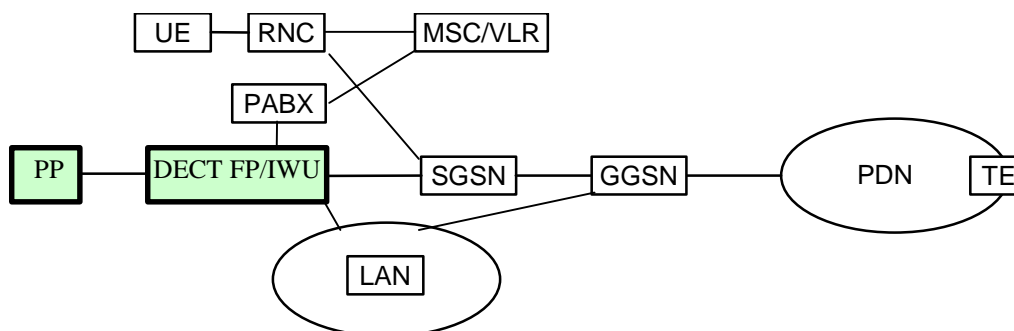


Figure 37: Architecture for cordless access to mobile services and mobile access to private (cordless) services

Annex B (informative): Bibliography

IETF RFC 768 (1980): "User Datagram Protocol" (STD0006).

IETF RFC 791 (1981): "Internet Protocol" (STD0005).

IETF RFC 792 (1981): "Internet Control Message Protocol" (STD0005).

IETF RFC 793 (1981): "Transmission Control Protocol" (STD0007).

IETF RFC 1034 (1987): "Domain Names - Concepts and Facilities" (STD0013).

IETF RFC 1542 (1993): "Clarification and Extensions for the Bootstrap Protocol".

IETF RFC 1661 (1994): "The Point-to-Point Protocol (PPP)" (STD0051).

IETF RFC 2002 (1996): "IP Mobility Support".

IETF RFC 2131 (1997): "Dynamic Host Configuration Protocol".

IETF RFC 2373 (1998): "IP Version 6 Addressing Architecture".

IETF RFC 2461 (1998): "Neighbor Discovery for IP Version 6 (IPv6)".

IETF RFC 2462 (1998): "IPv6 Stateless Address Autoconfiguration".

History

Document history		
V1.1.1	November 2001	Publication