3GPP TSG_CN   **Tdoc NP-000475**
Plenary Meeting #9, Oahu, Hawaii
20th – 22nd September 2000.

Source: **TSG_N WG 3**

Title: **CRs to R00 Work Item RT Facsimile part 1 of 2**

Agenda item: **7.7.3**

Document for: **APPROVAL**

Introduction:

This document contains **4** CRs on **R00** Work Item **RT Facsimile**, that has been agreed by **TSG_N WG3**, and is forwarded to TSG_N Plenary meeting #9 for approval.

Doc-2nd-	Spec	CR	Rev	Phase	Subject	Cat	Version-Current
N3-000302	23.910	012		R99	Deletion of UMTS NT-RT FAX from R'99	F	3.1.0
N3-000303	27.001	029		R99	Deletion of UMTS NT-RT FAX from R'99	F	3.5.0
N3-000327	27.002	005		R99	Deletion of UMTS NT-RT FAX from R'99	F	3.4.0
N3-000300	29.007	023		R99	Deletion of UMTS NT-RT FAX from R'99	F	3.5.0

3GPP N3/SMG3 WPD Meeting #11
Oslo, Norway, 10th – 14th July 2000

Document **N3-000300**

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

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29.007	**CR**	**023**		Current Version:	**3.5.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑   *↑ CR number as allocated by MCC support team*

For submission to:	**TSG CN#9**	for approval	**X**	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic		*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: (U)SIM ☐   ME **X**   UTRAN / Radio ☐   Core Network **X**
(at least one should be marked with an X)

Source:	TSG_N3		**Date:**	2000-07-11

Subject: Deletion of UMTS NT-RT FAX from R'99

Work item: Technical Enhancements & Improvements (TEI)

Category: F   Correction   **X**   **Release:**

Category		X	Release	
F	Correction	**X**	Phase 2	
A	Corresponds to a correction in an earlier release		Release 96	
B	Addition of feature		Release 97	
C	Functional modification of feature		Release 98	
D	Editorial modification		Release 99	**X**
			Release 00	

(only one category shall be marked with an X)

Reason for change: UMTS NT-RT FAX is moved from R'99 to R'00 and should be deleted from R'99.

Clauses affected: See attached pages

Other specs affected:	Other 3G core specifications	**X**	→ List of CRs:	23.910CR12, 27.001CR29, and 27.002CR005
	Other GSM core specifications		→ List of CRs:	
	MS test specifications		→ List of CRs:	
	BSS test specifications		→ List of CRs:	
	O&M specifications		→ List of CRs:	

Other comments:

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1   Scope

The present document identifies the Mobile-services Switching Centre/Interworking Functions (MSC/IWFs) and requirements to support interworking between:

    a) PLMN and PSTN;

    b) PLMN and ISDN;

for circuit switched services in the PLMN. It is not possible to treat ISDN and PSTN as one type of network, even when both ISDN and PSTN subscribers are served by the same exchange because of the limitations of the PSTN subscribers access i.e. analogue connection without D-channel signalling.

Within the present document, the requirements for voice and non-voice (data) calls are considered separately.

From GSM R99 onwards the following services are no more required to be provided by a GSM PLMN:

- the dual Bearer Services "alternate speech/data" (BS 61) and "speech followed by data" (BS 81);
- the dedicated services for PAD (BS 4x) and Packet access (BS 5x);
- the single asynchronous and synchronous Bearer Services (BS 21..26, BS 31..34).

If a PLMN network still provides these services it shall fulfil the specification of GSM R98.

The present document is valid for a 2nd generation PLMN (GSM) as well as for a 3rd generation PLMN (UMTS). If text applies only for one of these systems it is explicitly mentioned by using the terms "GSM" and "UMTS". If text applies to both of the systems, but a distinction between the ISDN/PSTN and the PLMN is necessary, the term "PLMN" is used.

Descriptions related to facsimile are not applied to UMTS but to GSM.

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, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

[1]   ITU-T Recommendation G.711: "Pulse code modulation (PCM) of voice frequencies".

[2]   ITU-T Recommendation I.460: "Multiplexing, rate adaption and support of existing interfaces".

[3]   ITU-T Recommendation I.464: "Multiplexing, rate adaption and support of existing interfaces for restricted 64 kbit/s transfer capability".

[4]   ITU-T Recommendation Q.922 (1992): "DSS 1 Data link layer: ISDN data link layer specification for frame mode bearer services".

[5]   ITU-T Recommendation Q.931 (05/98): "DSS 1 - ISDN user network interface layer 3 specification for basic call control".

[6]   ITU-T Recommendation V.22: "1200 bits per second duplex modem standardized for use in the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits".

[7]   ITU-T Recommendation V.24: "List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)".

[8]   ITU-T Recommendation V.25: "Automatic answering equipment and/or parallel automatic calling equipment on the general switched telephone network including procedures for disabling of echo control devices for both manually and automatically established calls".

[9]   ITU-T Recommendation V.32: "A family of 2-wire, duplex modems operating at data signalling rates of up to 9600 bit/s for use on the general switched telephone network and on leased telephone-type circuits".

[10]   ITU-T Recommendation V.32bis: "A duplex modem operating at data signalling rates of up to 14 400 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits"

[11]   ITU-T Recommendation V.34: "A modem operating at data signalling rates of up to 33 600 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits".

[12]   ITU-T Recommendation V.42: "Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion".

[13]   ITU-T Recommendation V.42bis: "Data Compression for Data Circuit Terminating Equipment (DCE) using Error Correction Procedures".

[14]   ITU-T Recommendation V.90: "A digital modem and analogue modem pair for use on the Public Switched Telephone Network (PSTN) at data signalling rates of up to 56 000 bit/s downstream and up to 33 600 bit/s upstream".

[15]   ITU-T Recommendation V.110: "Support of data terminal equipments (DTEs) with V-Series interfaces by an integrated services digital network".

[16]   ITU-T Recommendation V.120: "Support by an ISDN of data terminal equipment with V-Series type interfaces with provision for statistical multiplexing".

[17]   ETR 018: "Integrated Services Digital Network (ISDN); Application of the Bearer Capability (BC), High Layer Compatibility (HLC) and Low Layer Compatibility (LLC) information elements by terminals supporting ISDN services".

[18]   ETS 300 102-1 Edition 1 (1990): "Integrated Services Digital Network (ISDN); User-network interface layer 3 Specifications for basic call control".

[19]   EN 300 403-1 V1.2.2 (1998-04): "Integrated Services Digital Network (ISDN); Digital Sunscriber Signalling System No. One (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification".

[20]   GSM 01.01: "Digital cellular telecommunication system (Phase 2+); GSM Release 1999 Specifications".

[21]   GSM 01.04: "Digital cellular telecommunication system (Phase 2+); Abbreviations and acronyms".

[22]   GSM 02.01: "Digital cellular telecommunication system (Phase 2+); Principles of telecommunication services supported by a GSM Public Land Mobile Network (PLMN)".

[23]   GSM 02.03: "Digital cellular telecommunications system (Phase 2+); Teleservices supported by a GSM Public Land Mobile Network (PLMN)".

[24]   GSM 03.10: "Digital cellular telecommunications system (Phase 2+); GSM PLMN Connection types".

[25]   GSM 03.45: "Digital cellular telecommunications system (Phase 2+); Technical realization of facsimile group 3 transparent".

[26]   GSM 03.50: "Digital cellular telecommunications system (Phase 2+); Transmission planning aspects of the speech service in the GSM Public Land Mobile Network (PLMN) system".

[27]   GSM 04.21: "Digital cellular telecommunications system (Phase 2+); Rate adaption on the Mobile Station - Base Station System (MS - BSS) interface".

[28] GSM 08.20: "Digital cellular telecommunication system (Phase 2+); Rate adaption on the Base Station System - Mobile-services Switching Centre (BSS - MSC) interface".

[29] GSM 08.60: "Digital cellular telecommunications system (Phase 2+); Inband control of remote transcoders and rate adaptors for Enhanced Full Rate (EFR) and full rate traffic channels".

[30] GSM 09.02 version 3.x.y: "Digital cellular telecommunications system (Phase 2+); Mobile Application Part (MAP) specification".

[31] GSM 09.03: "Digital cellular telecommunication system (Phase 2+); Signalling requirements on interworking between the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN) and the Public Land Mobile Network (PLMN)".

[32] 3G TS 21.101: "3rd Generation Partnership Project; Technical Specification Group: Release 1999 Specifications".

[33] 3G TS 22.002: " Bearer Services (BS) supported by a GSM Public Land Mobile Network (PLMN)".

[34] 3G TS 22.004: "General on supplementary services".

[35] 3G TS 23.003: "Numbering, addressing and identification".

[36] 3G TS 23.008: "Organization of subscriber data".

[37] 3G TS 23.011: "Technical realization of supplementary services".

[38] ~~3G TS 23.046: "Technical realization of facsimile group 3 non-transparent".~~VOID

[39] 3G TS 23.054: "Description for the use of a Shared Inter Working Function in a GSM PLMN; Stage 2".

[40] 3G TS 24.008: " Mobile radio interface layer 3 specification".

[41] 3G TS 24.022: "Radio Link Protocol (RLP) for data and telematic services on the Mobile Station - Base Station System (MS - BSS) interface and the Base Station System - Mobile-services Switching Centre (BSS - MSC) interface".

[42] 3G TS 25.415: "Iu Interface CN-UTRAN User Plane Protocols".

[43] 3G TS 27.001: "General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)".

[44] 3G TS 27.002: "Terminal Adaptation Functions (TAF) for services using asynchronous bearer capabilities".

[45] 3G TS 27.003: "Terminal Adaptation Functions (TAF) for services using synchronous bearer capabilities".

[46] 3G TS 29.002: "Mobile Application Part (MAP) specification".

[47] 3G TS 29.006: "Interworking between a Public Land Mobile Network (PLMN) and a Packet Switched Public Data Network/Integrated Services Digital Network (PSPDN/ISDN) for the support of packet switched data transmission services".

[48] ISO/IEC 3309: "Telecommunications and information exchange between systems - High-level data link control (HDLC) procedures - Frame structure".

[49] IETF RFC 1662: "PPP in HDLC-like framing".

[50] Mobile Internet Access Forum: "PIAFS Specification Ver. 1.1, 2.1".

[51] ITU-T Recommendation V.8: "Procedures for starting sessions of data transmission over the public switched telephone network".

[52] TS 26.111: "Codec for Circuit Switched Multimedia Telephony Service; Modifications to H.324".

[53] 3G TR 23.910: " Circuit Switched Data Bearer Services".

9 Interworking to PSTN

9.2 Data Calls

9.2.1 Network interworking mobile originated

9.2.1.2 Modem Selection

In general terms the indication of the bearer capability parameter "Information Transfer Capability" will be utilized in the call set-up message to determine when the modem should be selected in the call.

In case of single calls, the modem function shall operate in the calling mode in case of mobile originated calls and in the answering mode in case of mobile terminated calls.

In case of dual data calls (alternate speech/facsimile group 3) the operation mode of the modem (working in calling or answering mode) depend on the initial call setup direction and on the optional parameter "Reverse Call Setup Direction" information element of the MODIFY message. If this information element is omitted the direction is derived from the initial call setup direction, i.e. the mode is the same as in case of single calls.

For the attribute value "3,1 kHz audio Ex PLMN" and "facsimile group 3", the modem will be selected immediately. The line procedure according to V.25 will then be carried out using the appropriate modem functions.

For the Teleservice 61 "Alternate speech/facsimile group 3", (if speech is selected as the first service), the modem is made available but not selected until the subscriber indicates the change of service request (see subclause 9.3).

For "alternate speech/facsimile group 3" calls refer to GSM 03.45 and 03.46 (GSM) and 3G TS 23.146 (UMTS).

9.3 Interworking Alternate Speech / Facsimile Group 3 Calls

9.3.1 General

The procedure for the alternate speech/facsimile group 3 services is invoked at MS-MSC link during the call set-up phase. This service is invoked by indication of repeated bearer capability information elements in the setup message and/or call confirmed message respectively (preceded by a repeat indicator "circular"), one indicating speech and the other indicating facsimile group 3. The facsimile service requested will be indicated by the information transfer capability "facsimile group 3", as for a normal single call. The bearer capability first indicated i.e. speech or facsimile group 3 determines the first selection required of the network by the subscriber. Depending on the type of service requested and direction of call establishment (M0/MT, see relevant clauses of 3G TS 27 series) low layer and high layer capabilities may also be included. The MSC/IWF will perform both compatibility checking and subscription checking on both sets of capabilities as for normal data calls. If either the subscription check or the compatibility check fails then the call will be rejected. The only exception to this is when TS61/TS62 negotiation takes place, see 3G TS 27.001.

The applicable rules for provision of supplementary services are laid down in 3G TS 22.004.

The "speech" phase of the call, when invoked is handled by the transcoder and will utilize normal telephony teleservice interworking requirements and mobile network capabilities. This includes any requirements for echo cancellers etc. as indicated in subclause 9.1. The "facsimile group 3" phase of the call, when invoked, will utilize the appropriate data interworking capability (IWF including modem) and may use either the transparent or non-transparent mobile network capability in the case of GSM. In UMTS only the non-transparent service is applicable.

The network shall provide, for service and operational reasons, a rapid and reliable changeover of capability upon request from the mobile user. This changeover may involve the disabling, by-passing or introduction of particular network functions (e.g. speech coder, modem etc.) and change of the channel configuration on the radio interface. This changeover is initiated on the receipt of the "MODIFY" message (see 3G TS 24.008) from the MS. The network itself will not initiate a changeover.

3GPP N3/SMG3 WPD Meeting #11
Oslo, Norway, 10th – 14th July 2000

Document **N3-000302**

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23.910	CR	012	Current Version:	3.1.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑   *↑ CR number as allocated by MCC support team*

For submission to:	TSG CN#9	for approval	X	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic		*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM [ ]   ME [X]   UTRAN / Radio [ ]   Core Network [X]
(at least one should be marked with an X)

Source:	TSG_N3		**Date:**	2000-07-11

Subject: Deletion of UMTS NT-RT FAX from R'99

Work item: Technical Enhancements & Improvements (TEI)

Category: F   Correction

(only one category shall be marked with an X)

F	Correction	**F**	**Release:**
A	Corresponds to a correction in an earlier release		
B	Addition of feature		
C	Functional modification of feature		
D	Editorial modification		

Release:	
Phase 2	
Release 96	
Release 97	
Release 98	
Release 99	X
Release 00	

Reason for change: UMTS NT-RT FAX is moved from R'99 to R'00 and should be deleted from R'99.

Clauses affected: See attached pages

Other specs affected:

Other 3G core specifications	X	→ List of CRs:	27.001CR029, 27.002CR005, and 29.007CR023
Other GSM core specifications		→ List of CRs:	
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments:

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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, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

[1] GSM TS 03.10: "GSM Public Land Mobile Network (PLMN) connection types".

[2] 3G TS 21.905: "3G Vocabulary".

[3] 3G TS 22.100: "UMTS Phase 1".

[4] 3G TS 22.002: "Bearer Services Supported by a GSM PLMN".

[5] 3G TS 22.101: "Service Principles".

[6] 3G TS 22.105: "Services and Service Capabilities".

[7] 3G TS 23.002: "Network Architecture".

[8] 3G TS 23.034: "High Speed Circuit Switched Data (HSCSD) -Stage 2".

[9] 3G TS 23.101: "General UMTS Architecture".

[10] 3G TS 23.107: "Quality of Service, Concept and Architecture".

[11] 3G TS 24.022: "Radio Link Protocol (RLP) for Data and Telematic Services on the Mobile Station - Base Station System (MS-BSS) Interface and the Base Station System - Moile-services Switching Centre (BSS-MSC) Interface".

[12] 3G TS 25.322: "Radio Link Control (RLC) Protocol Specification".

[13] 3G TS 25.415: "UTRAN Iu Interface user plane protocols".

[14] 3G TS 27.001: "General on Terminal Adaption Functions (TAF) for Mobile Station (MS)".

[15] 3G TS 29.007: "General Requirements on Interworking between the PLMN and the ISDN or PSTN".

[16] ITU-T Recommendation V.90: "A digital modem and analogue modem pair for use on the Public Switched Telephone Network (PSTN) at data signalling rates of up to 56 000 bit/s downstream and up to 33 600 bit/s upstream".

[17] ~~ITU-T Recommendation T.30 "Procedures for document facsimile transmission in the general switched telephone network".~~VOID

[18] GSM 04.21: "Digital cellular telecommunications system (Phase 2+); Rate adaption on the Mobile Station - Base Station System (MS - BSS) interface".

[19] GSM 08.20: "Digital cellular telecommunication system (Phase 2+); Rate adaption on the Base Station System - Mobile-services Switching Centre (BSS - MSC) interface".

[20] ITU-T Recommendation I.366.1: "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2".

[21] ITU-T Recommendation Q.2630.1: "AAL Type 2 Signalling Protocol (Capability Set 1)".

5 UMTS Bearer Services

The UMTS bearer services are described by the UMTS BC-IE. Five services (or services categories) are currently distinguishable from the UMTS BC-IE:

- Speech.

- Transparent Data for support of Multimedia.

- Transparent Data.

  Non-transparent Fax.

- Non-transparent data.

Speech is currently not in the scope of the present document.

Each UMTS bearer service is supported by a Radio Access Bearers (RAB). The RABs in turn are described by the QoS parameters. There may be one or several RAB candidates for supporting a UMTS bearer service. The possible candidates are described by a mapping of the BC-IE to RAB QoS described in Section 5.2.

5.1 UMTS Bearer Services in Release 99

5.1.2 Non-Transparent FaxVOID

This service is distinguished by the following BC-IE parameters:

ITC = Fax Group 3 (ITU-T T.30 [17]).

WAIUR shall not be more than 28.8 kbit/s. The possible AIURs are limited to 14,4 and 28,8 kbit/s.

5.2 BC-IE to RAB QoS Mapping

5.2.1 Non-transparent services, including Fax

Service identified by the BC IE	Non-transparent data	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate (1)	14.4, 28.8, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
Guaranteed bit rate	14.4 kbit/s	Operator can choose 14.4, 28.8 or 57.6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	< 250 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		

	SDU error ratio	< 10 %	Subject to operator tuning
	Residual bit error ratio	10^{-3}	Subject to operator tuning.
	Delivery of erroneous SDUs	No	
	SDU format information		
	RAB Subflow Combination bit rate	57.6 kbit/s	
	RAB Subflow Combination bit rate	28.8 kbit/s	
	RAB Subflow Combination bit rate	14.4 kbit/s	
	RAB Subflow Combination bit rate	0 kbit/s	indicates DTX, RFCI is not assigned

NOTE 1: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.

3GPP N3/SMG3 WPD Meeting #11
Oslo, Norway, 10ᵗʰ – 14ᵗʰ July 2000

Document ***N3-000303***

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	27.001	CR	029	Current Version:	3.5.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to:	TSG CN#9	for approval	X	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic		*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ☐   ME **X**   UTRAN / Radio ☐   Core Network **X**
(at least one should be marked with an X)

Source:	TSG_N3	**Date:**	2000-07-11

Subject:	Deletion of UMTS NT-RT FAX from R'99

Work item:	Technical Enhancements & Improvements (TEI)

Category:	F	Correction		**F**	**Release:**	Phase 2	
	A	Corresponds to a correction in an earlier release				Release 96	
(only one category	B	Addition of feature				Release 97	
shall be marked	C	Functional modification of feature				Release 98	
with an X)	D	Editorial modification				Release 99	**X**
						Release 00	

Reason for change:	UMTS NT-RT FAX is moved from R'99 to R'00 and should be deleted from R'99.

Clauses affected:	See attached pages

Other specs affected:	Other 3G core specifications	**X**	→ List of CRs:	23.910CR012, 27.002CR029, and 29.007CR023
	Other GSM core specifications		→ List of CRs:	
	MS test specifications		→ List of CRs:	
	BSS test specifications		→ List of CRs:	
	O&M specifications		→ List of CRs:	

Other comments:	

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3GPP

1 Scope

The present document is based on the principles of terminal adaptor functions presented in the ITU-T I-series of recommendations (I.460 to I.463).

The PLMN supports a wide range of voice and non-voice services in the same network. In order to enable non-voice traffic in the PLMN there is a need to connect various kinds of terminal equipment to the Mobile Termination (MT). The target of the present document is to outline the functions needed for the terminal adaptation.

In the 3G TS 22.002 the bearer services are described. The general network configuration is described in TS 23.002 and the GSM PLMN access reference configuration is defined in GSM 04.02. The various connection types used in the GSM PLMN are presented in GSM 03.10. Terminology used in the present document is presented in GSM 01.04 (ETR 350), 3G 21.905 and 3G TS 29.990. For support of data services between a PLMN and other networks see TS 29.007.

The present document is valid for a 2nd generation PLMN (GSM) as well as for a 3rd generation PLMN (UMTS). If text applies only for one of these systems it is explicitly mentioned by using the terms "GSM" and "UMTS". If text applies to both of the systems, but a distinction between the ISDN/PSTN and the PLMN is necessary, the term "PLMN" is used.

NOTE: From R99 onwards the following services are no longer required by a PLMN:

- the dual Bearer Services "alternate speech/data" and "speech followed by data";

- the dedicated services for PAD and Packet access;

- BS 21 ... 26 and BS 31 ... 34.

The support of these services is still optional. The specification of these services is not within the scope of the present document. For that, the reader is referred to GSM Release 98.

Descriptions related to facsimile are not applied to UMTS but to GSM.

8 Functions common to all interfaces

8.5 Alternate speech/facsimile group 3

Editor's note: V.25bis is outdated. References to V.25 bis procedures need to replaced by corresponding procedures based on V.250 and 3G TS 27.007.

These alternate services may be initiated by either V.25 bis or manual procedures. In the former case, standard call establishment procedures will apply. In the latter case, CT106, CT107, CT108.2 and CT109 are in the OFF condition.

Selection of the data phase (from the speech phase) will be by manual intervention via the MS causing ICM by means of CT108.2 going to ON condition, refer to GSM 03.45 or 3G TS 23.146. The ensuing data phase shall follow all the operational procedures as described in 3G 27-series.

Selection of the speech phase (from the data phase) will be by manual intervention via the MS causing ICM (phone off-hook condition at the MT and data call end condition at the TE).

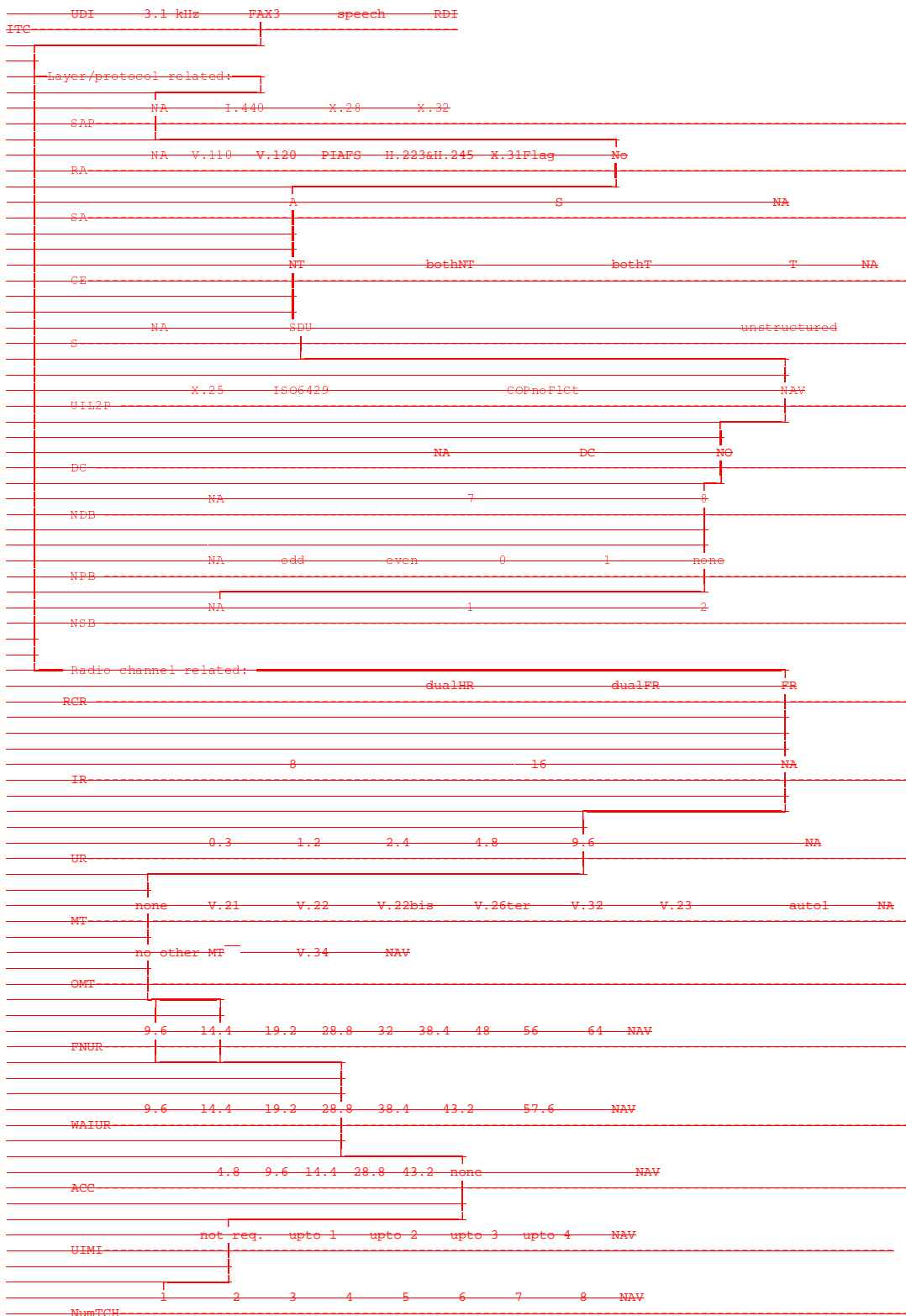During the ensuing speech phases, CT107, CT106 and CT109 will be maintained in the OFF condition.

Subsequent re-selection of the data phase will be by manual intervention via the MS causing CT108.2 going to ON condition initiating ICM. At this point, re-synchronization will take place as described in subclause 8.1 above.

Annex B (normative):
Setting of Bearer Capability, Low Layer Compatibility and High Layer Compatibility Information Element for PLMN Bearer Services and PLMN TeleServices

B.1   Bearer Capability Information Element

B.1.10 Teleservice 61, Alternate Speech and Facsimile group 3

B.1.10.3 ~~Teleservice 61, Facsimile group 3 in UMTS~~VOID

```
ITC ─── UDI    3.1 kHz    FAX3    speech    RDI

    Layer/protocol related:
         NA       I.440      X.28      X.32
SAP ───
         NA   V.110  V.120  PIAFS  H.223&H.245  X.31Flag      No
RA ───
              A                           S                NA
SA ───
              NT        bothNT        bothT         T      NA
CE ───
         NA       SDU                          unstructured
S ───
         X.25    ISO6429          COPnoFlCt              NAV
UIL2P ───
                      NA          DC          NO
DC ───
              NA              7              8
NDB ───
              NA    odd    even    0      1      none
NPB ───
              NA              1              2
NSB ───

    Radio channel related:
                         dualHR        dualFR        FR
RCR ───
              8              16              NA
IR ───
         0.3    1.2    2.4    4.8    9.6            NA
UR ───
         none  V.21   V.22   V.22bis  V.26ter  V.32  V.23     auto1   NA
MT ───
         no other MT        V.34      NAV
OMT ───
         9.6   14.4   19.2  28.8  32  38.4  48  56   64  NAV
FNUR ───
         9.6   14.4   19.2  28.8  38.4  43.2  57.6    NAV
WAIUR ───
         4.8   9.6  14.4  28.8  43.2  none          NAV
ACC ───
         not req.   upto 1   upto 2   upto 3  upto 4   NAV
UIMI ───
         1     2    3    4    5    6    7    8    NAV
NumTCH ───
```

3GPP N3/SMG3 WPD Meeting #11
Oslo, Norway, 10th – 14th July 2000

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e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

27.002	CR	005	Current Version:	3.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑　　　　*↑ CR number as allocated by MCC support team*

For submission to:	TSG CN#9	for approval	X	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic		*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG　　The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects:　　(U)SIM ☐　ME **X**　UTRAN / Radio ☐　Core Network **X**
(at least one should be marked with an X)

Source:	TSG_N3	**Date:**	2000-07-11

Subject:	Deletion of UMTS NT-RT FAX from R'99

Work item:	Technical Enhancements & Improvements (TEI)

Category:　　F　Correction **X**　**Release:** Phase 2 ☐
　　　　　　　　A　Corresponds to a correction in an earlier release ☐　Release 96 ☐
(only one category　B　Addition of feature ☐　Release 97 ☐
shall be marked　C　Functional modification of feature ☐　Release 98 ☐
with an X)　D　Editorial modification ☐　Release 99 **X**
　　　　　　　　　　　　　　　　　　　　　　　　　　Release 00 ☐

Reason for change:	UMTS NT-RT FAX is moved from R'99 to R'00 and should be deleted from R'99.

Clauses affected:	See attached pages

Other specs　Other 3G core specifications **X**　→ List of CRs: | 23.910CR012, 27.001CR029, and 29.007CR023 |
affected:
　　　　　Other GSM core ☐　→ List of CRs:
　　　　　specifications
　　　　　MS test specifications ☐　→ List of CRs:
　　　　　BSS test specifications ☐　→ List of CRs:
　　　　　O&M specifications ☐　→ List of CRs:

Other comments:	

help.doc

<---------- double-click here for help and instructions on how to create a CR.

1 Scope

The present document defines the interfaces and Terminal Adaptation Functions (TAF) integral to a Mobile Termination (MT) which enables the attachment of asynchronous terminals to a MT (see GSM 04.02 [3] and 3G TS 23.101 [6]).

The general aspects of Terminal Adaptation Functions are contained in 3G TS 27.001 [10].

The present document covers support of these services for the following interfaces and procedures:

(i)	ITU-T V.14 [16] procedures.
(ii)	ITU-T V.21 [17] DTE/DCE interface.
(iii)	ITU-T V.22bis [18] DTE/DCE interface.
(iv)	ITU-T V.32 [24] DTE/DCE procedures.
(v)	ITU-T I.420 [14] S interface.
(vi)	ITU-T V.25 bis [21] signalling procedures.
(vii)	ITU-T V.250 [22] signalling procedures.

The asynchronous data rates between the MT and the TE2 are defined in 3G TS 22.002 [5].

NOTE: From GSM R99 onwards the following services are no longer required a GSM PLMN:

the dual Bearer Services "alternate speech/data" and "speech followed by data";

the dedicated services for PAD and Packet access;

the BS 21 ... 26 and BS 31 ... 34.

The support of these services is still optional. The specification of these services is not within the scope of the present document. For that, the reader is referred to GSM Release 98.

Descriptions related to facsimile are not applied to UMTS but to GSM.