

3GPP TSG CN Plenary Meeting #13
Beijing, China, 19th – 21st September 2001

Tdoc NP-010438

Source: TSG CN WG3
Title: CRs on R99 Work Item CS Bearers
Agenda item: 7.20
Document for: APPROVAL

Introduction:

This document contains 6 CRs on R99 Work Item "CS Bearers", that have been agreed by TSG CN WG3, and are forwarded to TSG CN Plenary meeting #13 for approval.

Spec	CR	Rev	Doc-2nd-	Phase	Subject	Cat	Versio
27.001	061		N3-010271	R99	Removal of erroneous IR value	F	3.9.0
27.001	062	1	N3-010304	Rel-4	Removal of erroneous IR value	A	4.4.0
27.001	065	1	N3-010305	R99	Negotiation of Rate adaptation/Other rate adaptation	F	3.9.0
27.001	066	1	N3-010306	Rel-4	Negotiation of Rate adaptation/Other rate adaptation	A	4.4.0
27.001	063	1	N3-010307	Rel-4	Removal of erroneous information in B.1.3.1.6	F	4.4.0
27.001	067		N3-010308	R99	Removal of erroneous information in B.1.3.1.6	F	3.9.0

CR-Form-v4

CHANGE REQUEST

⌘ **27.001 CR 061** ⌘ ev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of erroneous IR value		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ TS 27.001 use the attribute value "not-used" (in table B.5) as the default value for IR. However, this value is not defined in TS 24.008. In order to align these specifications only values defined in TS 24.008 should be used in TS 27.001. TS 27.001 also show (in table B.5) an IR value of 4 kbit/s that does not exist.
Summary of change:	⌘ In table B5 (BC parameter settings) the default value of IT is changed from "not.used" to 16 kbit/s and the IR attribute values 4 kbit/s and "not-used" are removed. All flowdiagrams modified accordingly.
Consequences if not approved:	⌘ Incorrect information in specification.

Clauses affected:	⌘ Table B.5, B.1.2 and B.1.3.		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘ Deleted flowdiagrams are highlighted in BLUE colour. New flowdiagrams are highlighted in GREEN colour.		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

First amended section

Table B.5: BC parameter setting (part 1)

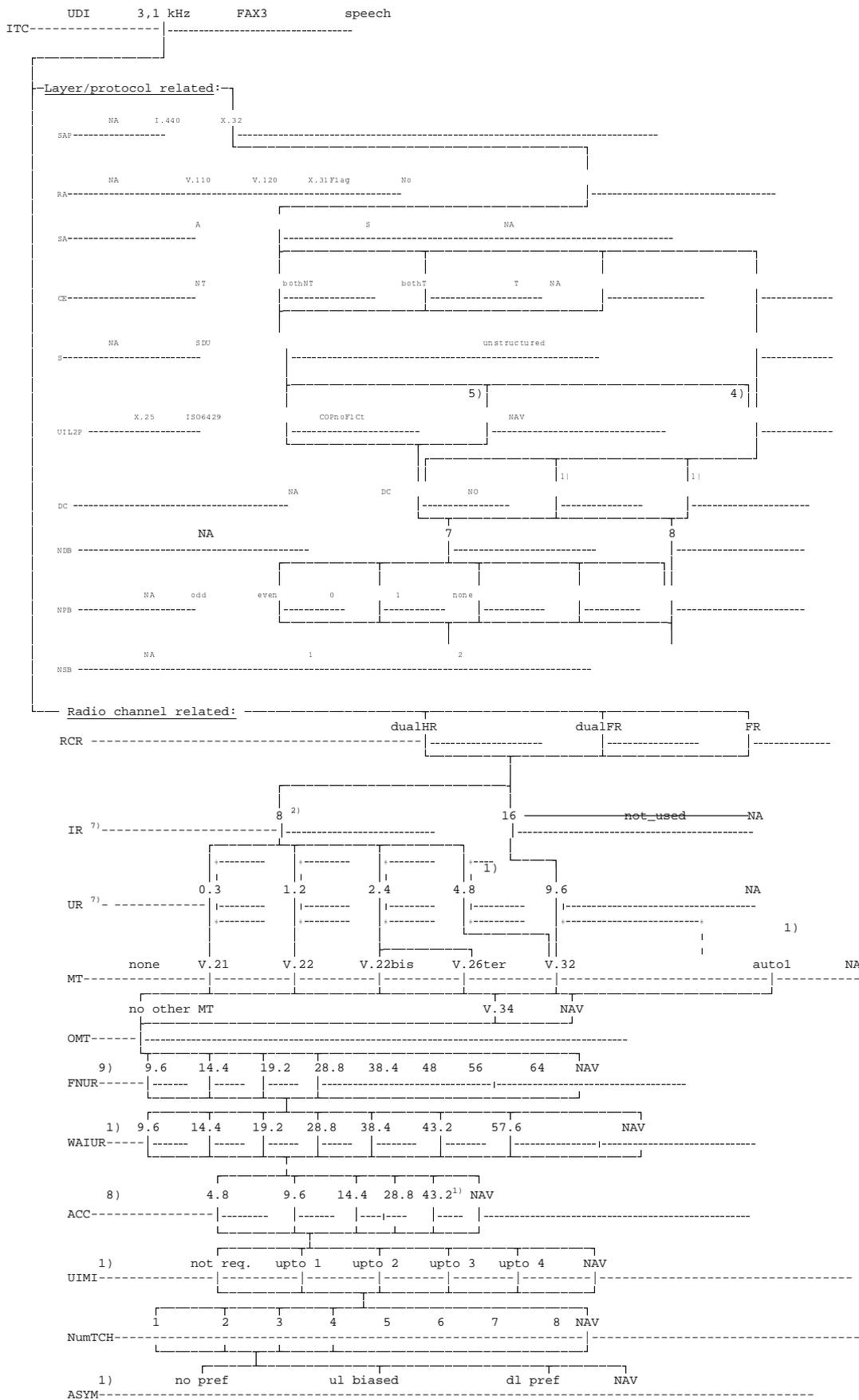
		common setting of field values		
Abbreviations for Parameters and Values				
		default setting of field values (NA)		
			V	V
ITC...Information Transfer Capability:	- Speech - UDI..Unrestricted Digital - FAX3..Group 3 Facsimile - 3,1 kHz..3,1 kHz Ex PLMN - RDI..Restricted Digital			
TM....Transfer Mode:	- ci..Circuit		X	X
S.....Structure:	- SDU..Service Data Unit Integrity - Unstructured		X	
C.....Configuration:	- pp..Point to point		X	X
E.....Establishment:	- de..Demand		X	X
SA....Sync/Async:	- S..Synchronous - A..Asynchronous			
N.....Negotiation	- ibn..in band negotiation not possible		X	X
UR....User Rate:	- 0.3..0.3 kbit/s - 1.2..1.2 kbit/s - 2.4..2.4 kbit/s - 4.8..4.8 kbit/s - 9.6..9.6 kbit/s		X	
IR....Intermediate Rate:	- 48.. 4-8_kbit/s - 816.. 8-16_kbit/s - 16.. 16_kbit/s - not_used..not used		X	
NICT..Network Independent Clock on Tx:	- not_required.. Not required - required		X	X
NICR..Network Independent Clock on Rx:	- not_accepted..not accepted - accepted		X	X
NSB...Number of Stop Bits:	- 1..1 bit - 2..2 bit		X	
NDB...Number of Data Bits Excluding Parity If Present:	- 7.. 7 bit - 8.. 8 bit		X	
NPB...Parity Information:	- Odd - Even - None - 0.. Forced to 0 - 1.. Forced to 1		X	
UIL1P.User Information Layer 1 Protocol	- def..default layer 1 protocol		X	X

End of first amended section

ASYM -----

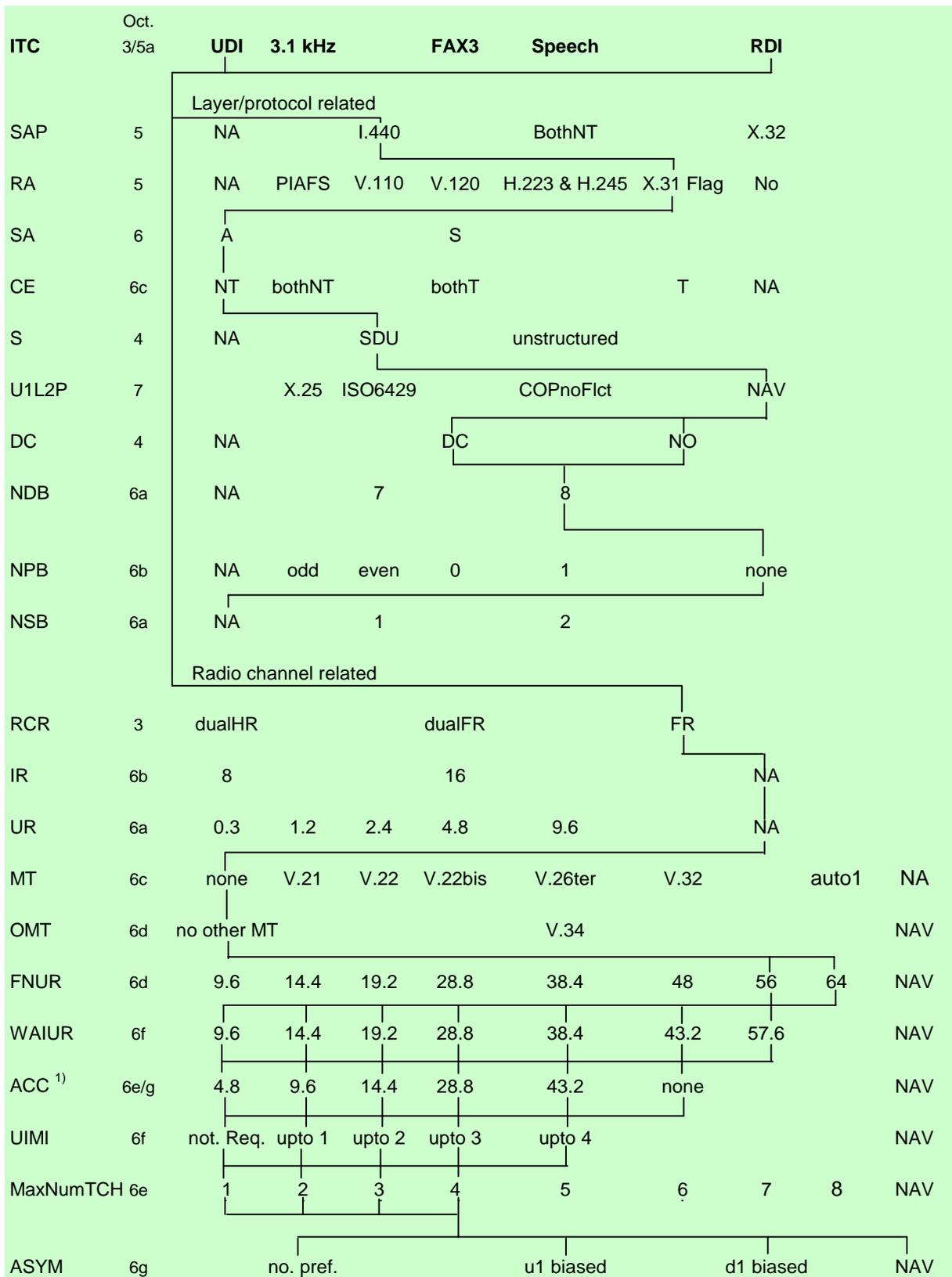
- 1) for CE:NT or "both";
- 2) for CE:T only or CE:NT and NIRR:6kb/s (not for the SETUP message);
- 3) Void;
- 4) for MT CALLS in the SETUP message or MO/MT CALLS with "out-band" flow control requested;
- 5) for MO/MT CALLS with no flow control requested;
- 6) Void;
- 7) the V.120 relevant BC parameters (octet 5b) shall be set according to the LLC (see clause B.2);
- 8) IR and UR are overridden by FNUR, ACC and MaxNumTCH;
- 9) ACC may have several values simultaneously (bit map coding).

B.1.2.2 3,1 kHz audio ex-PLMN information transfer capability



- 1) for CE:NT or "both";
- 2) for CE:T only or CE:NT and NIRR:6kb/s (not for the SETUP message);
- 3) Void;
- 4) for MT CALLS in the SETUP message or MO/MT CALLS with "out-band" flow control requested (not for V.21 modem type);
- 5) for MO/MT CALLS with no flow control requested;
- 6) Void;
- 7) IR and UR are overridden by FNUR, ACC and MaxNumTCH.
- 8) ACC may have several values simultaneously (bit map coding).
- 9) in case of MT = auto1 the value of FNUR has no meaning.

B.1.2.3 Frame Tunnelling Mode



B.1.2.4 PIAFS

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI					
Layer/protocol related											
SAP	5	NA	I.440		BothNT	X.32					
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No			
SA	6	A		S							
CE	6c	NT	bothNT		bothT		T	NA			
S	4	NA	SDU		unstructured						
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV			
DC	4	NA		DC		NO					
NDB	6a	NA	7		8						
NPB	6b	NA	odd	even	0	1		none			
NSB	6a	NA	1		2						
Radio channel related											
RCR	3	dualHR		dualFR		FR					
IR	6b	8		16				NA			
UR	6a	0.3	1.2	2.4	4.8	9.6		NA			
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto1	NA		
OMT	6d	no other MT				V.34			NAV		
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	48	56	64	NAV
WAIUR	6f	9.6	14.4	19.2	28.8		38.4	43.2	57.6	NAV	
ACC	6e/g	4.8	9.6	14.4	28.8	43.2	none			NAV	
UIMI	6f	NA	not. Req.	upto 1	upto 2	upto 3	upto 4			NAV	
MaxNumTCH	6e	1	2	3	4	5	6	7	8	NAV	
ASYM	6g		no. pref.			u1 biased		d1 biased		NAV	

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI					
Layer/protocol related											
SAP	5	NA	I.440		BothNT	X.32					
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No			
SA	6	A		S							
CE	6c	NT	bothNT		bothT		T	NA			
S	4	NA	SDU		unstructured						
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV			
DC	4	NA		DC		NO					
NDB	6a	NA	7		8						
NPB	6b	NA	odd	even	0	1		none			
NSB	6a	NA	1		2						
Radio channel related											
RCR	3	dualHR		dualFR		FR					
IR	6b	8		16		not-used		NA			
UR	6a	0.3	1.2	2.4	4.8	9.6		NA			
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto1	NA		
OMT	6d	no other MT				V.34			NAV		
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	48	56	64	NAV
WAIUR	6f	9.6	14.4	19.2	28.8	38.4	43.2	57.6		NAV	
ACC	6e/g	4.8	9.6	14.4	28.8	43.2	none			NAV	
UIMI	6f	NA	not. Req.	upto 1	upto 2	upto 3	upto 4			NAV	
MaxNumTCH	6e	1	2	3	4	5	6	7	8	NAV	
ASYM	6g		no. pref.			u1 biased		d1 biased		NAV	

End of second amended section

Start of third amended section

B.1.3 Bearer Service 30, Data Circuit Duplex Synchronous

B.1.3.1 Unrestricted/restricted digital information transfer capability

B.1.3.1.1 Non-X.32 Cases Transparent FNUR \leq 48 kbit/s (TCH/F4.8, TCH/F9.6, TCH/14.4, TCH/F28.8)

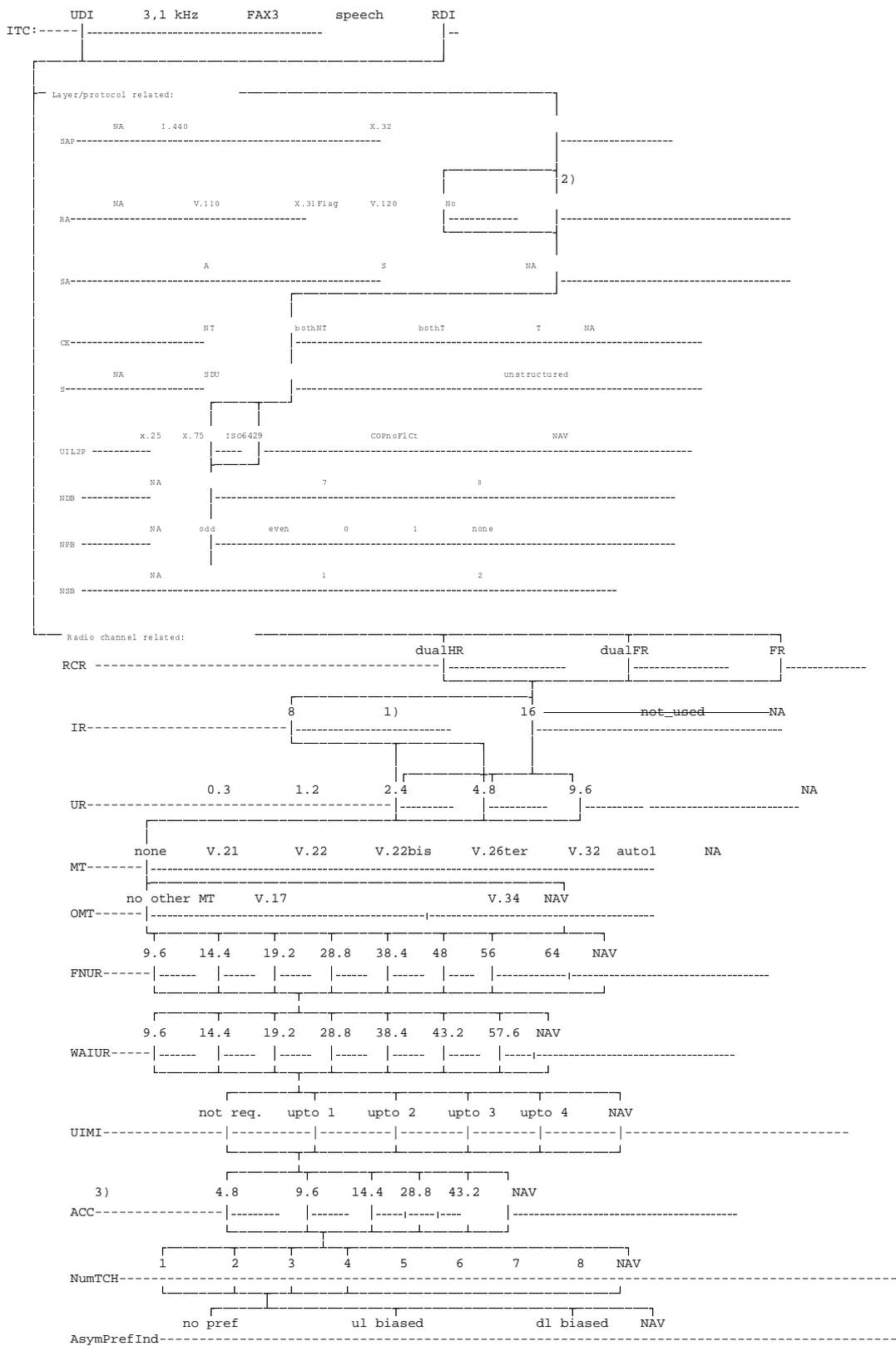
Applies to GSM/GERAN only. No HO to/from UTRAN

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	TDI				
Layer/protocol related										
SAP	5	NA	I.440		BothNT	X.32				
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT		bothT		T	NA		
S	4	NA	SDU		unstructured					
U1L2P	7	X.25	ISO6429		COPnoFlct		NAV			
DC	4	NA		DC		NO				
NDB	6a	NA	7		8					
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1		2					
Radio channel related										
RCR	3	dualHR		dualFR		FR				
IR ¹⁾	6b	8		16				NA		
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT	6d	no other MT				V.34		NAV		
FNUR ¹⁾	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	NAV
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA		NAV
ACC ^{1,2)}	6e/g	4.8	9.6	14.4	28.8	32.0				NAV
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA		NAV
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV
ASYM	6g	no. pref.		u1 biased		d1 pref.				NAV

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI				
Layer/protocol related										
SAP	5	NA	I.440		BothNT	X.32				
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT		bothT		T	NA		
S	4	NA	SDU		unstructured					
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV		
DC	4	NA		DC		NO				
NDB	6a	NA	7		8					
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1		2					
Radio channel related										
RCR	3	dualHR		dualFR		FR				
IR ¹⁾	6b	8		16		not-used		NA		
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT	6d	no other MT				V.34		NAV		
FNUR ¹⁾	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	NAV
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA		NAV
ACC ^{1,2)}	6e/g	4.8	9.6	14.4	28.8	32.0				NAV
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA		NAV
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV
ASYM	6g	no. pref.		u1 biased		d1 pref.				NAV

- 1) IR and UR are overridden if FNUR, ACC and MaxNumTCH are available
- 2) ACC may have several values simultaneously (bit map coding).

B.1.3.1.2 X.32 Case



- 1) for NIRR:6kb/s (not for the SETUP message);
- 2) the V.120 relevant BC parameters (octet 5b) shall be set according to the LLC (see clause B.2);
- 3) ACC may have several values simultaneously (bit map coding).

B.1.3.1.3 Transparent FNUR=56 kbit/s, including 3G-H.324/M, (TCH/F9.6, TCH/F32.0, UTRAN)

ITC	Oct. 3/5a	UDI ³⁾	3.1 kHz	FAX3	Speech	RDI ³⁾				
		Layer/protocol related								
SAP	5	NA	I.440	BothNT		X.32				
RA ³⁾	5	NA	PIAFS	V.110 ³⁾	V.120	H.223 & H.245 ³⁾	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT	bothT				NA		
S	4	NA	SDU		unstructured					
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV		
DC	4	NA		DC				NO		
NDB	6a	NA		7				8		
NPB	6b	NA	odd	even	0			1	none	
NSB	6a	NA		1				2		
		Radio channel related								
RCR	3	dualHR		dualFR				FR		
IR ¹⁾	6b	8		16				NA		
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT ⁵⁾	6d	no other MT				V.34				
FNUR ^{1,5)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ^{1,2)}	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ⁴⁾	
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA	NAV	
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV ⁴⁾
ASYM	6g	no. pref.	u1 biased		d1 pref.				NAV	

ITC	Oct. 3/5a	UDI ³⁾	3.1 kHz	FAX3	Speech	RDI ³⁾				
		Layer/protocol related								
SAP	5	NA	I.440	BothNT	X.32					
RA ³⁾	5	NA	PIAFS	V.110 ³⁾	V.120	H.223 & H.245 ³⁾	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT	bothT	T			NA		
S	4	NA	SDU	unstructured						
U1L2P	7	X.25	ISO6429	COPnoFlct	NAV					
DC	4	NA	DC	NO						
NDB	6a	NA	7	8						
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1	2						
		Radio channel related								
RCR	3	dualHR	dualFR	FR						
IR ¹⁾	6b	8	16	not-used	NA					
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT ⁵⁾	6d	no other MT		V.34						
FNUR ^{1,5)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ^{1,2)}	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ⁴⁾	
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA	NAV	
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV ⁴⁾
ASYM	6g	no. pref.	u1 biased	d1 pref.				NAV		

- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH. IR and UR are not applicable to UMTS.
- 2) ACC may have several values simultaneously (bit map coding). However, handover to/from UTRAN is not possible if the network assigns other traffic channels than TCH/F9.6 or TCH/F32.0.
- 3) In case ITC=UDI, RA shall be set to V.110. In case ITC=RDI, RA shall be set to H.223&H245 or No.
- 4) In case ACC and MaxNumTCH are not available operation is restricted to UTRAN.
- 5) The parameters FNUR and OMT are mandatory for this service.

B.1.3.1.4 Transparent FNUR=56 kbit/s, including 3G-H.324M (TCH/F14.4)

Applies to GSM/GERAN only, no HO to/from UTRAN

ITC	Oct. 3/5a	UDI ³⁾	3.1 kHz	FAX3	Speech	RDI ³⁾			
Layer/protocol related									
SAP	5	NA	I.440	BothNT	X.32				
RA ³⁾	5	NA	PIAFS	V.110 ³⁾	V.120	H.223 & H.245 ³⁾	X.31 Flag	No ³⁾	
SA	6	A		S					
CE	6c	NT	bothNT	bothT	T	NA			
S	4	NA	SDU	unstructured					
U1L2P	7	X.25	ISO6429	COPnoFlct	NAV				
DC	4	NA	DC	NO					
NDB	6a	NA	7	8					
NPB	6b	NA	odd	even	0	1	none		
NSB	6a	NA	1	2					
Radio channel related									
RCR	3	dualHR	dualFR	FR					
IR ¹⁾	6b	8	16	NA					
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6	NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1
OMT ⁴⁾	6d	no other MT	V.34						
FNUR ^{1,4)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NAV	NAV
ACC ^{1,2,4)}	6e/g	4.8	9.6	14.4	28.8	32.0			NAV
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4	NA	NAV	
MaxNumTCH ⁴⁾	6e	1	2	3	4 ¹⁾	5	6	7	8
ASYM	6g	no. pref.	u1 biased	d1 pref.	NAV				

ITC	Oct. 3/5a	UDI ³⁾	3.1 kHz	FAX3	Speech	RDI ³⁾				
Layer/protocol related										
SAP	5	NA		I.440	BothNT	X.32				
RA ³⁾	5	NA	PIAFS	V.110 ³⁾	V.120	H.223 & H.245 ³⁾	X.31 Flag	No ³⁾		
SA	6	A			S					
CE	6c	NT	bothNT		bothT		T	NA		
S	4	NA		SDU	unstructured					
U1L2P	7	X.25		ISO6429	COPnoFlct	NAV				
DC	4	NA			DC	NO				
NDB	6a	NA		7		8				
NPB	6b	NA	odd	even	0	1	none			
NSB	6a	NA		1		2				
Radio channel related										
RCR	3	dualHR			dualFR	FR				
IR ¹⁾	6b	8			16	not-used	NA			
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6	NA			
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT ⁴⁾	6d	no other MT				V.34				
FNUR ^{1,4)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ^{1,2,4)}	6e/g	4.8	9.6	14.4	28.8	32.0				NAV
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4			NA	NAV
MaxNumTCH ⁴⁾	6e	1	2	3	4 ¹⁾	5	6	7	8	
ASYM	6g	no. pref.	u1 biased		d1 pref.			NAV		

- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH.
- 2) ACC may have several values simultaneously (bit map coding).
- 3) In case ITC=UDI, RA shall be set to V.110. In case ITC=RDI, RA shall be set to H.223 & H245 or No.
- 4) The parameters FNUR, OMT, ACC and MaxNumTCH are mandatory for this service.

B.1.3.1.5 Transparent FNUR = 64kbit/s including 3G-H.324/M (TCH/F9.6, TCH/F14.4, TCH/F32.0, UTRAN)

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI				
		Layer/protocol related								
SAP	5	NA	I.440	BothNT	X.32					
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT	bothT		T		NA		
S	4	NA	SDU		unstructured					
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV		
DC	4	NA		DC		NO				
NDB	6a	NA	7		8					
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1		2					
		Radio channel related								
RCR	3	dualHR		dualFR		FR				
IR ¹⁾	6b	8		16		not-used		NA		
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT ⁴⁾	6d	no other MT				V.34				
FNUR ^{1, 4)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ^{1, 2)}	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ³⁾	
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA	NAV	
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV ³⁾
ASYM	6g	no. pref.	u1 biased		d1 pref.			NAV		

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI				
Layer/protocol related										
SAP	5	NA	I.440	BothNT	X.32					
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT	bothT		T		NA		
S	4	NA	SDU		unstructured					
U1L2P	7	X.25	ISO6429		COPnoFlct			NAV		
DC	4	NA		DC		NO				
NDB	6a	NA	7		8					
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1		2					
Radio channel related										
RCR	3	dualHR		dualFR		FR				
IR ¹⁾	6b	8		16				NA		
UR ¹⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	V.23	auto1	NA
OMT ⁴⁾	6d	no other MT				V.34				
FNUR ^{1, 4)}	6d	9.6	14.4	19.2	28.8	38.4	48	56	64	
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ^{1, 2)}	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ³⁾	
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA	NAV	
MaxNumTCH ¹⁾	6e	1	2	3	4	5	6	7	8	NAV ³⁾
ASYM	6g	no. pref.	u1 biased			d1 pref.		NAV		

- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH. IR and UR are not applicable to UMTS.
- 2) ACC may have several values simultaneously (bit map coding).
- 3) If ACC and MaxNumTCH are not available operation is restricted to UTRAN.

- 4) The parameters FNUR and OMT are mandatory for this service.
- 2) If ACC, UIMI, MaxNumTCH and ASYM are not available operation is restricted to UTRAN.
- 3) IR and UR are overridden by FNUR, ACC and MaxNumTCH. IR and UR are not applicable to UMTS.

End of third amended section

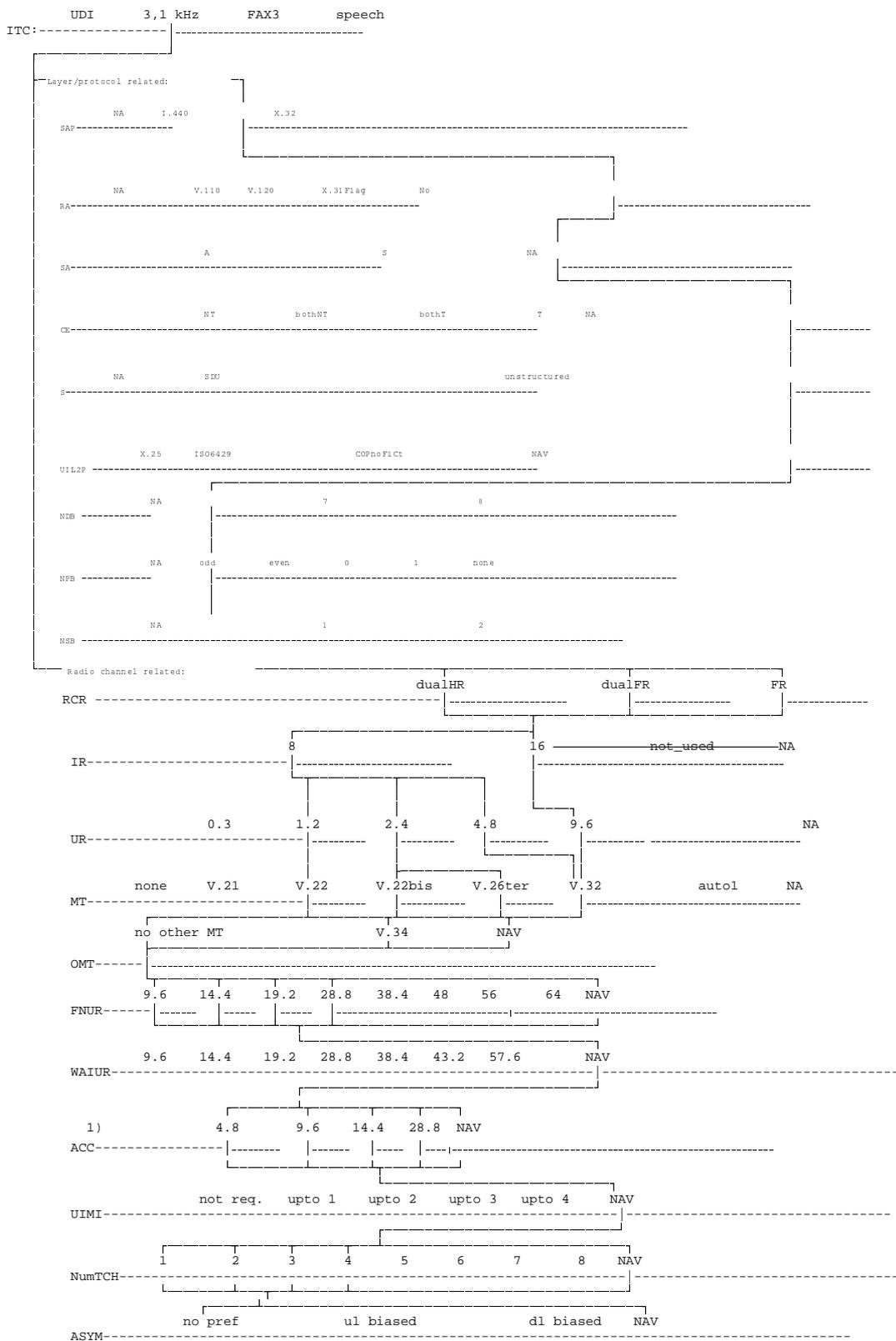
B.1.3.1.7 Synchronous transparent 56 kbit/s (RDI) and 64kbit/s (UDI) (UTRAN)

See B.1.3.1.3 and B.1.3.1.5.

Start of fourth amended section

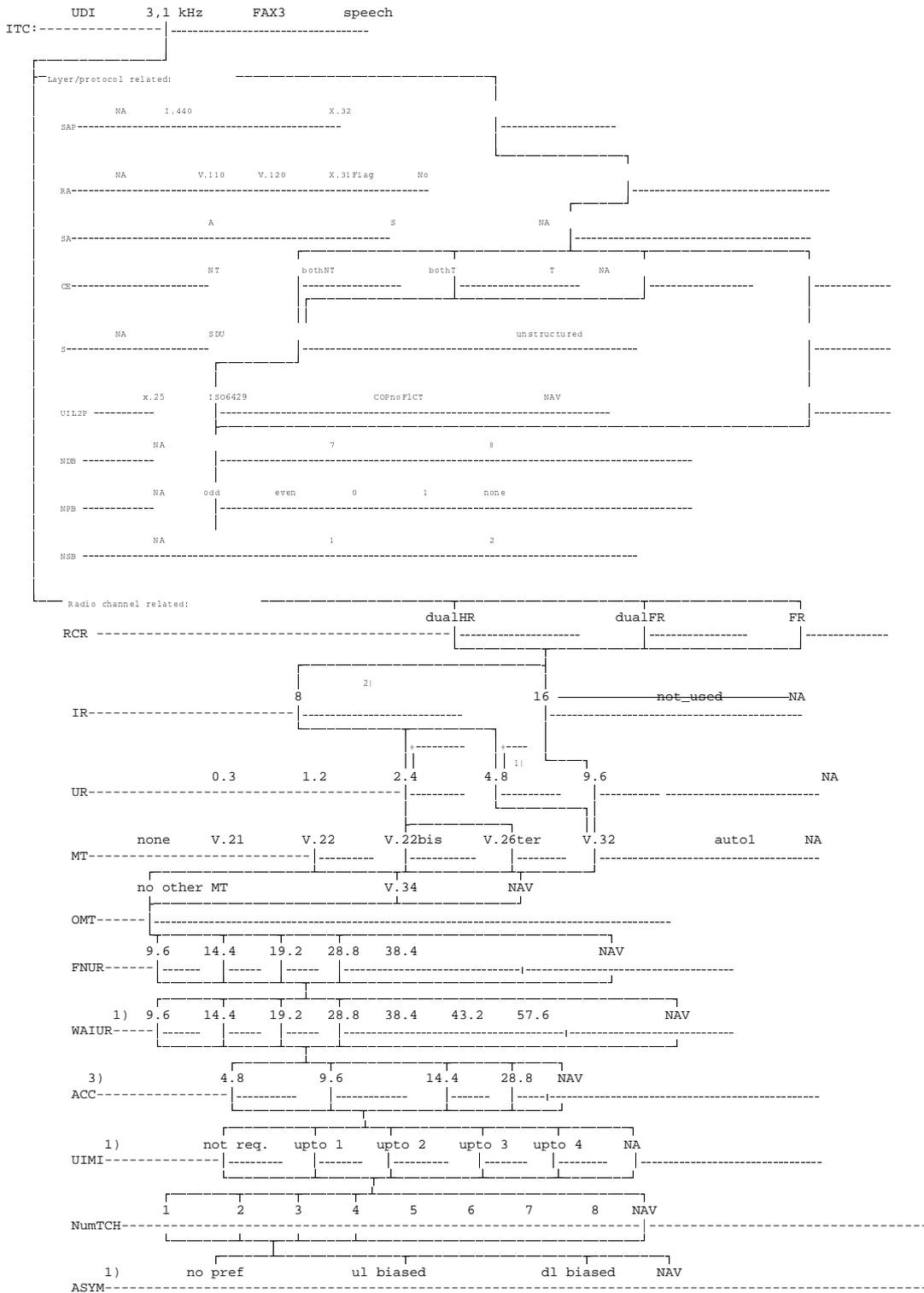
B.1.3.2 3,1 kHz audio ex-PLMN information transfer capability

B.1.3.2.1 Non-X.32 Cases



1) ACC may have several values simultaneously (bit map coding).

B.1.3.2.2 X.32 Case



- 1) for CE:NT or "both".
- 2) for CE:T or CE:NT and NIRR:6kb/s (not for the SETUP message).
- 3) ACC may have several values simultaneously (bit map coding).

B.1.3.2.3 3G-H.324/M Case

```

ITC:-----
      UDI      3,1 kHz      FAX3      speech
      -----
      Layer/protocol related:
      -----
      SAP-----
      NA      I.440      X.32
      -----
      RA-----
      NA      V.110      V.120      X.31Flag      H.223 and H.24521      No
      -----
      SA-----
      A      S      NA
      -----
      CE-----
      NT      bothNT      bothT      T      NA
      -----
      S-----
      NA      SDU      unstructured
      -----
      UII2P-----
      X.25      ISO6429      COPnoFlCt      NAV
      -----
      NDB-----
      NA      7      8
      -----
      NPB-----
      NA      odd      even      0      1      none
      -----
      NSB-----
      NA      1      2
      -----
      Radio channel related:
      -----
      RCR-----
      dualHR      dualFR      FR
      -----
      IR-----
      8      16      not_used      NA
      -----
      UR-----
      0.3      1.2      2.4      4.8      9.6      NA
      -----
      MT-----
      none      V.21      V.22      V.22bis      V.26ter      V.32      V.23      auto1      NA
      -----
      OMT-----
      no other MT      V.34      NAV
      -----
      FNUR-----
      9.6      14.4      19.2      28.8      32.0      33.6      38.4      48      56      64      NAV
      -----
      WAIUR-----
      9.6      14.4      19.2      28.8      38.4      43.2      57.6      NAV
      -----
      1)      4.8      9.6      14.4      28.8      32.0      43.2      NAV
      -----
      ACC-----
      not req.      upto 1      upto 2      upto 3      upto 4      NAV
      -----
      UIMI-----
      1      2      3      4      5      6      7      8      NAV
      -----
      NumTCH-----
  
```

1) ACC may have several values simultaneously (bit map coding).

B.1.4 Bearer Service 40 ... 46, PAD Access Asynchronous

Void

B.1.5 Bearer Service 50 ... 53 ,Data Packet Duplex Synchronous, Unrestricted digital information transfer capability

Void.

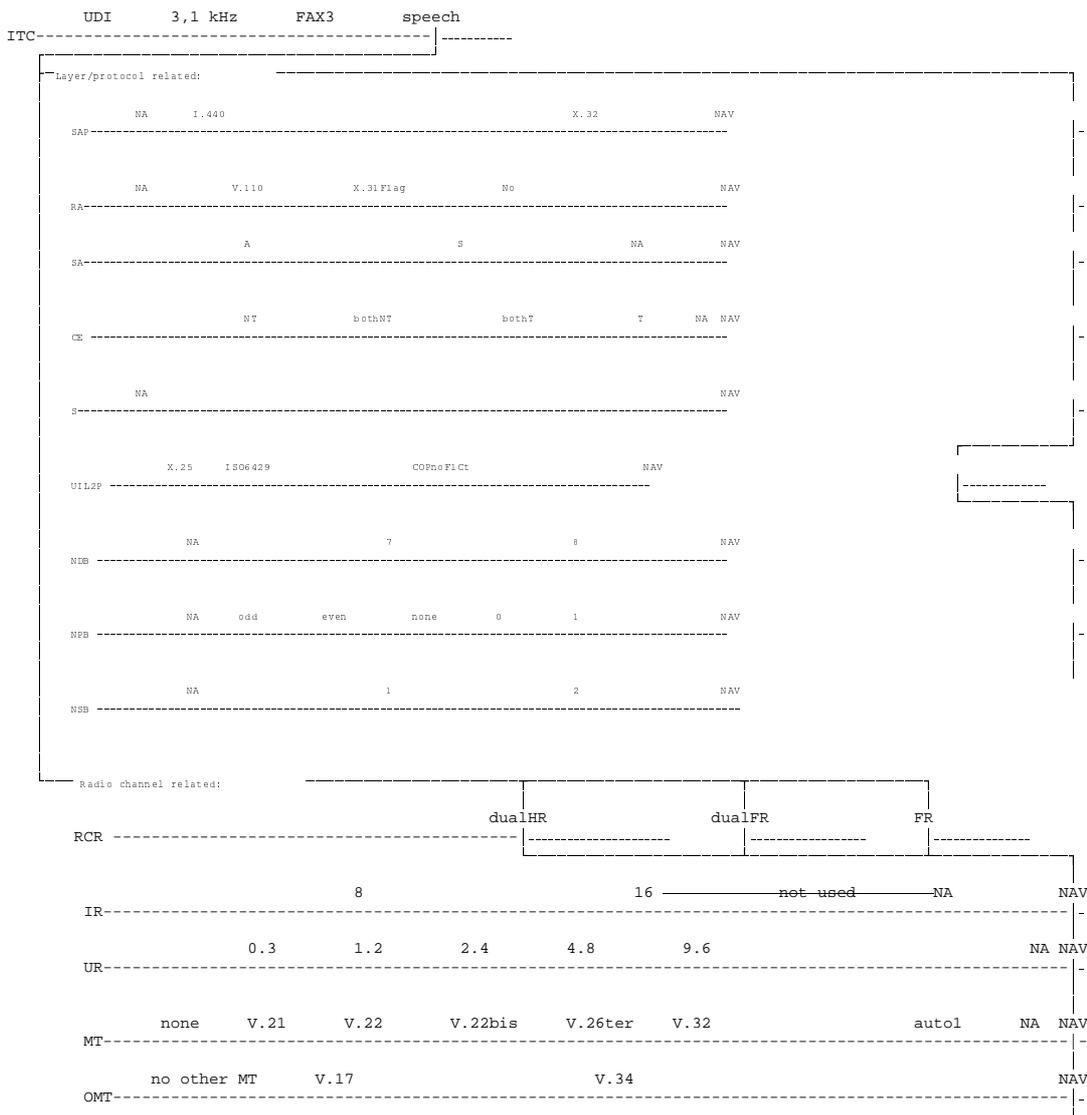
B.1.6 Bearer Service 61, Alternate Speech/Data

Void.

B.1.7 Bearer Service 81, Speech followed by Data

Void.

B.1.8 Teleservice 11 ... 12, Speech



FNUM	9.6	14.4	19.2	28.8	38.4	48	56	64	NAV
WAIUR	9.6	14.4	19.2	28.8	38.4	43.2	57.6		NAV
ACC		4.8	9.6	14.4					NAV
UIMI	not req.	upto 1	upto 2	upto 3	upto 4				NAV
NumTCH	1	2	3	4	5	6	7	8	NAV

B.1.9 Teleservice 21 ... 23, Short Message

Not applicable.

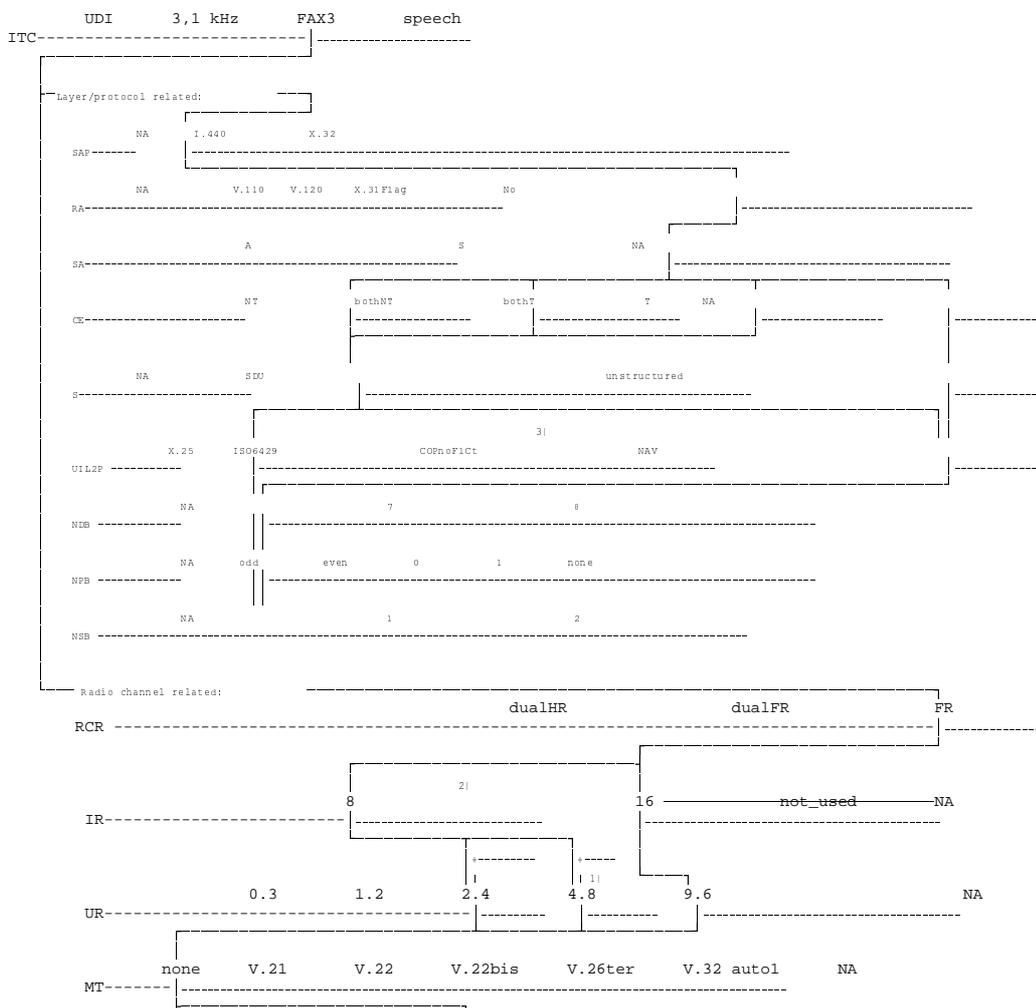
B.1.10 Teleservice 61, Alternate Speech and Facsimile group 3

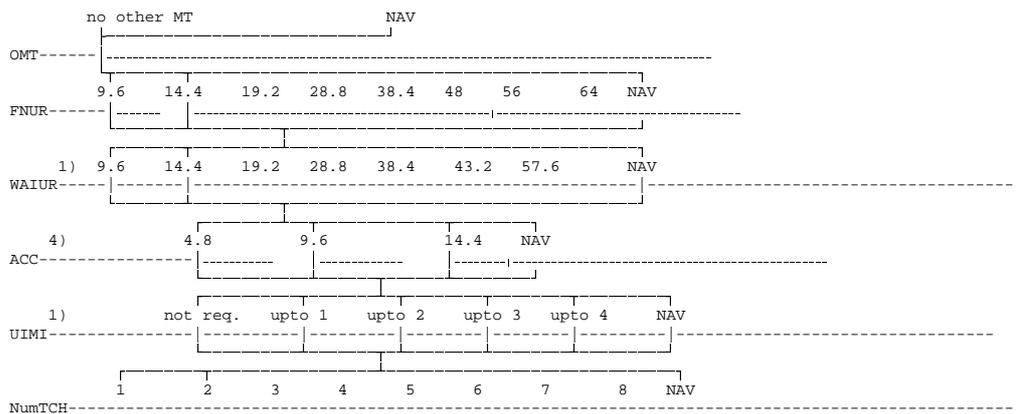
The information element of the "repeat indicator" is set to the value "circular for successive selection (alternate)".

B.1.10.1 Teleservice 61, Speech

Ref. subclause B.1.8.

B.1.10.2 Teleservice 61, Facsimile group 3 in GSM





- 1) for CE:NT or "both";
- 2) for CE:T only;
- 3) for MT CALL in the SETUP message only;
- 4) ACC may have several values simultaneously (bit map coding).

End of fourth and last amended section

CR-Form-v4
CHANGE REQUEST
⌘ 27.001 CR CR 062 ⌘ ev 1 ⌘ Current version: 4.4.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of erroneous IR value		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ TS 27.001 use the attribute value "not-used" (in table B.5) as the default value for IR. However, this value is not defined in TS 24.008. In order to align these specifications only values defined in TS 24.008 should be used in TS 27.001. TS 27.001 also show (in table B.5) an IR value of 4 kbit/s that does not exist.
Summary of change:	⌘ In table B5 (BC parameter settings) the default value of IT is changed from "not.used" to 16 kbit/s and the IR attribute values 4 kbit/s and "not-used" are removed. All flowdiagrams modified accordingly.
Consequences if not approved:	⌘ Incorrect information in specification.

Clauses affected:	⌘ Table B.5, Flowdiagrams B.1.2, B.1.3, B.1.8, B1.10.2 and B.1.10.3		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘ Deleted flowdiagrams are highlighted in BLUE colour. New flowdiagrams are highlighted in GREEN colour.		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

Start of first amended section

Table B.5: BC parameter setting (part 1)

Abbreviations for Parameters and Values:		common setting of field values	default setting of field values (NA)
ITC...Information Transfer Capability:	<ul style="list-style-type: none"> - Speech - UDI..Unrestricted Digital - FAX3..Group 3 Facsimile - 3,1 kHz..3,1 kHz Ex PLMN - RDI..Restricted Digital 	V	V
TM....Transfer Mode:	<ul style="list-style-type: none"> - ci..Circuit 	X	X
S.....Structure:	<ul style="list-style-type: none"> - SDU..Service Data Unit Integrity - Unstructured 	X	
C.....Configuration:	<ul style="list-style-type: none"> - pp..Point to point 	X	X
E.....Establishment:	<ul style="list-style-type: none"> - de..Demand 	X	X
SA....Sync/Async:	<ul style="list-style-type: none"> - S..Synchronous - A..Asynchronous 		
N.....Negotiation	<ul style="list-style-type: none"> - ibn..in band negotiation not possible 	X	X
UR....User Rate:	<ul style="list-style-type: none"> - 0.3..0.3 kbit/s - 1.2..1.2 kbit/s - 2.4..2.4 kbit/s - 4.8..4.8 kbit/s - 9.6..9.6 kbit/s 	X	
IR....Intermediate Rate:	<ul style="list-style-type: none"> - 48.. 4-8 kbit/s - 816.. 8-16 kbit/s - 16.. 16 kbit/s - not_used..not used 	X	
NICT..Network Independent Clock on Tx:	<ul style="list-style-type: none"> - not_required.. Not required - required 	X	X
NICR..Network Independent Clock on Rx:	<ul style="list-style-type: none"> - not_accepted..not accepted - accepted 	X	X
NSB...Number of Stop Bits:	<ul style="list-style-type: none"> - 1..1 bit - 2..2 bit 	X	
NDB...Number of Data Bits Excluding Parity If Present:	<ul style="list-style-type: none"> - 7.. 7 bit - 8.. 8 bit 	X	
NPB...Parity Information:	<ul style="list-style-type: none"> - Odd - Even - None - 0.. Forced to 0 - 1.. Forced to 1 	X	
UIL1P.User Information Layer 1 Protocol	<ul style="list-style-type: none"> - def..default layer 1 protocol 	X	X

Table B.5: BC parameter setting (part 2)

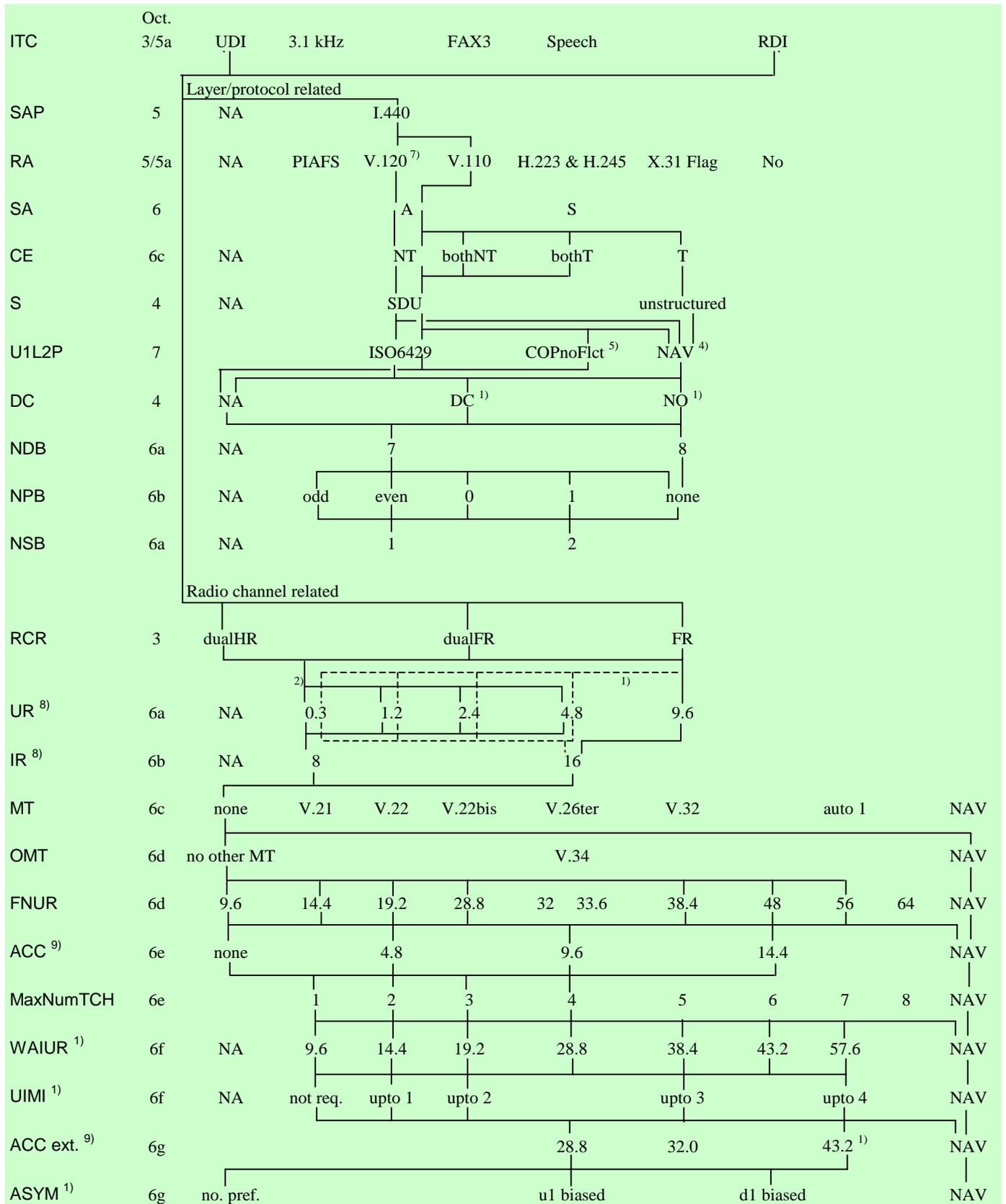
Abbreviations for Parameters and Values	common setting of field values	
	default setting of field values (NA)	
DM...Duplex Mode:	- - fd.. Full Duplex	X X
MT...Modem Type:	- V.21 - V.22 - V.22 bis - V.26 ter - V.32 - autol.. autobaoding type 1 - none	X
RCR...Radio Channel Requirement:	- FR Full Rate support only Mobile Station - dual HR Dual Rate support Mobile Station/ Half Rate preferred - dual FR Dual Rate support Mobile Station/ Full Rate preferred	
CE...Connection Element:	- T.. Transparent - NT.. Non Transparent - bothT both transparent preferred - bothNT both non Transparent preferred	
UIL2P.User Information Layer 2 Protocol:	- ISO6429..ISO6429, codeset 0,DC1/DC3 - COPnoFlCt..Character oriented protocol with no flow control mechanism	
SAP...Signalling Access Protocol:	- I.440.. I.440/450	X
RA...Rate Adaptation:	- V.110.. V.110/X.30 - X.31Flag.. X.31 flagstuffing - NO.. no rate adaptation - V.120 - PIAFS - H.223 and H.245	X
CS...Coding Standard:	- GSM	X X
NIRR..Negotiation of Intermediate Rate Requested:	NM..No Meaning associated with this value 6kbit/s..6kbit/s radio interface rate requested	X
DC...Data Compression	- DC.. compression possible/allowed - NO.. compression not possible/allowed	X

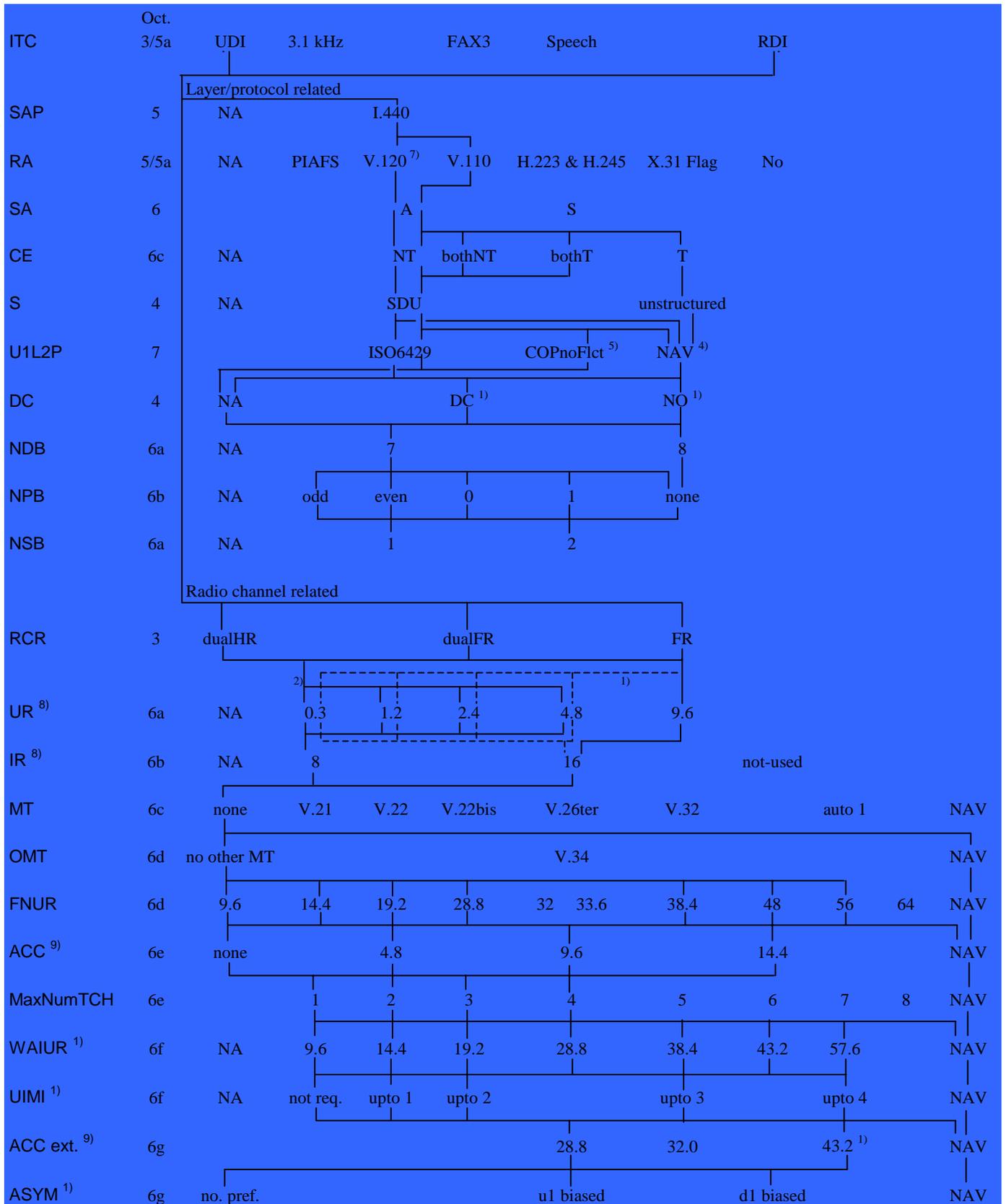
Table B.5: BC parameter setting (part 3)

Abbreviations for Parameters and Values	common setting of field values	
	default setting of field values (NA)	
FNUR...Fixed Network User Rate	<ul style="list-style-type: none"> - FNUR not applicable - 9.6.. 9.6 kbit/s - 14.4.. 14.4 kbit/s - 19.2.. 19.2 kbit/s - 28.8.. 28.8 kbit/s - 32.0.. 32.0 kbit/s - 33.6.. 33.6 kbit/s - 38.4.. 38.4 kbit/s - 48.0.. 48.0 kbit/s - 56.0.. 56.0 kbit/s - 64.0.. 64.0 kbit/s 	V
WAIUR...Wanted Air Interface User Rate	<ul style="list-style-type: none"> - WAIUR not applicable - 9.6.. 9.6 kbit/s - 14.4.. 14.4 kbit/s - 19.2.. 19.2 kbit/s - 28.8.. 28.8 kbit/s - 38.4.. 38.4 kbit/s - 43.2.. 43.2 kbit/s - 57.6.. 57.6 kbit/s - int 38.4.. interpreted by the network as 38.4 kbit/s 	X
ACC.....Acceptable channel codings	<ul style="list-style-type: none"> - 4.8.. TCH/F4.8 acceptable - 9.6.. TCH/F9.6 acceptable - 14.4..TCH/F14.4 acceptable - 28.8..TCH/F28.8 acceptable - 32.0..TCH/F32.0 acceptable - 43.2..TCH/F43.2 acceptable - none..No channel coding (defined by selecting none of the above 	
MaxNumTCH...Maximum Number of Traffic Channels	<ul style="list-style-type: none"> - 1.. 1 TCH - 2.. 2 TCH - 3.. 3 TCH - 4.. 4 TCH - 5.. 5 TCH - 6.. 6 TCH - 7.. 7 TCH - 8.. 8 TCH 	
OMT...Other modem type	<ul style="list-style-type: none"> - no other MT.. no other modem type - V.34.. V.34 	
User initiated modification indication	<ul style="list-style-type: none"> - not req.. user initiated modification not required - upto 1 TCH.. user initiated modification upto 1 TCH may be requested - upto 2 TCH.. user initiated modification upto 2 TCH may be requested - upto 3 TCH.. user initiated modification upto 3 TCH may be requested - upto 4 TCH.. user initiated modification upto 4 TCH may be requested 	X
Asymmetry preference indication	<ul style="list-style-type: none"> - 00 no preference - 01 up link biased asymmetry preferred - 10 down link biased asymmetry preferred 	

B.1.2 Bearer Service 20, Data Circuit Duplex Asynchronous

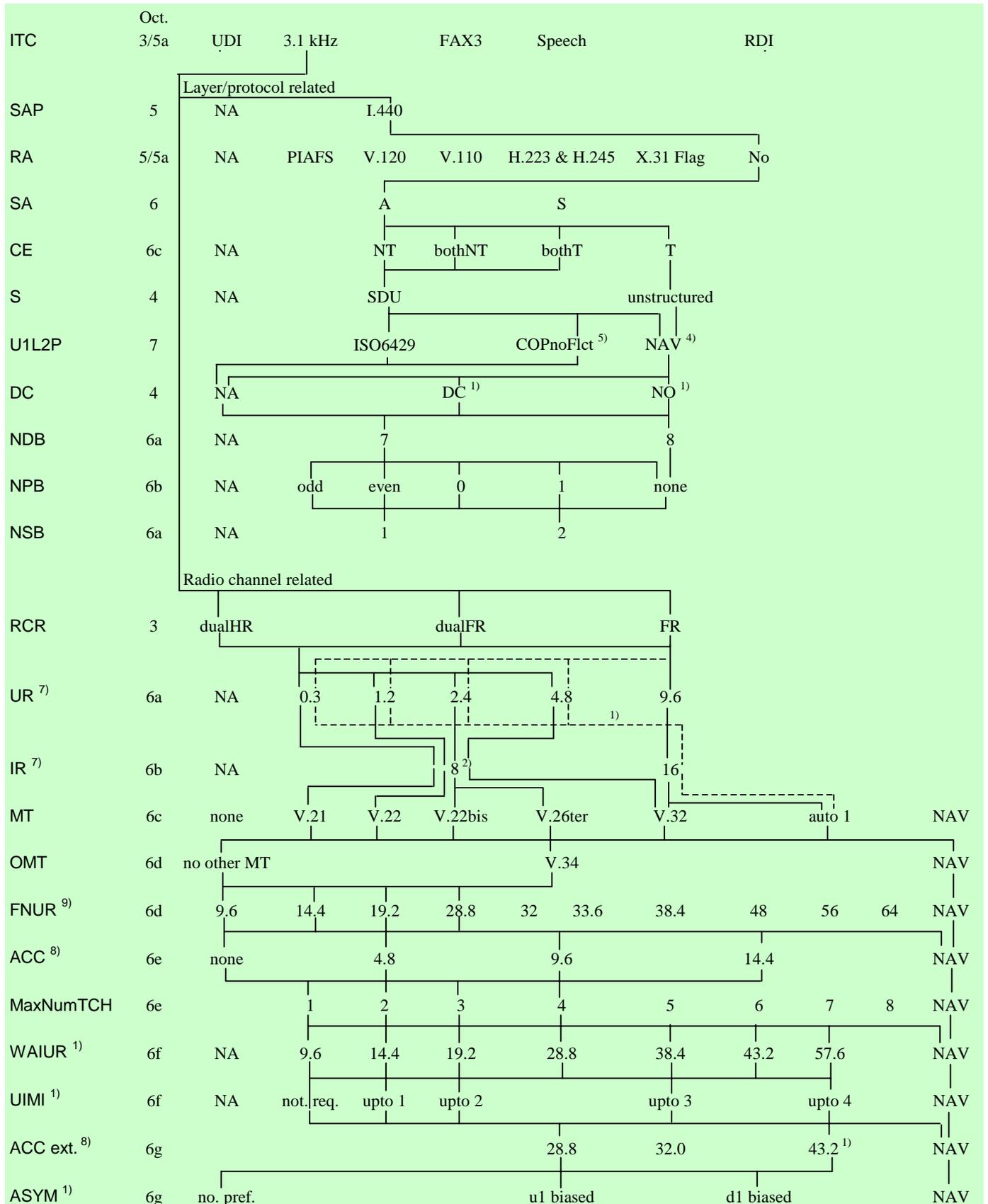
B.1.2.1 Unrestricted / restricted digital information transfer capability

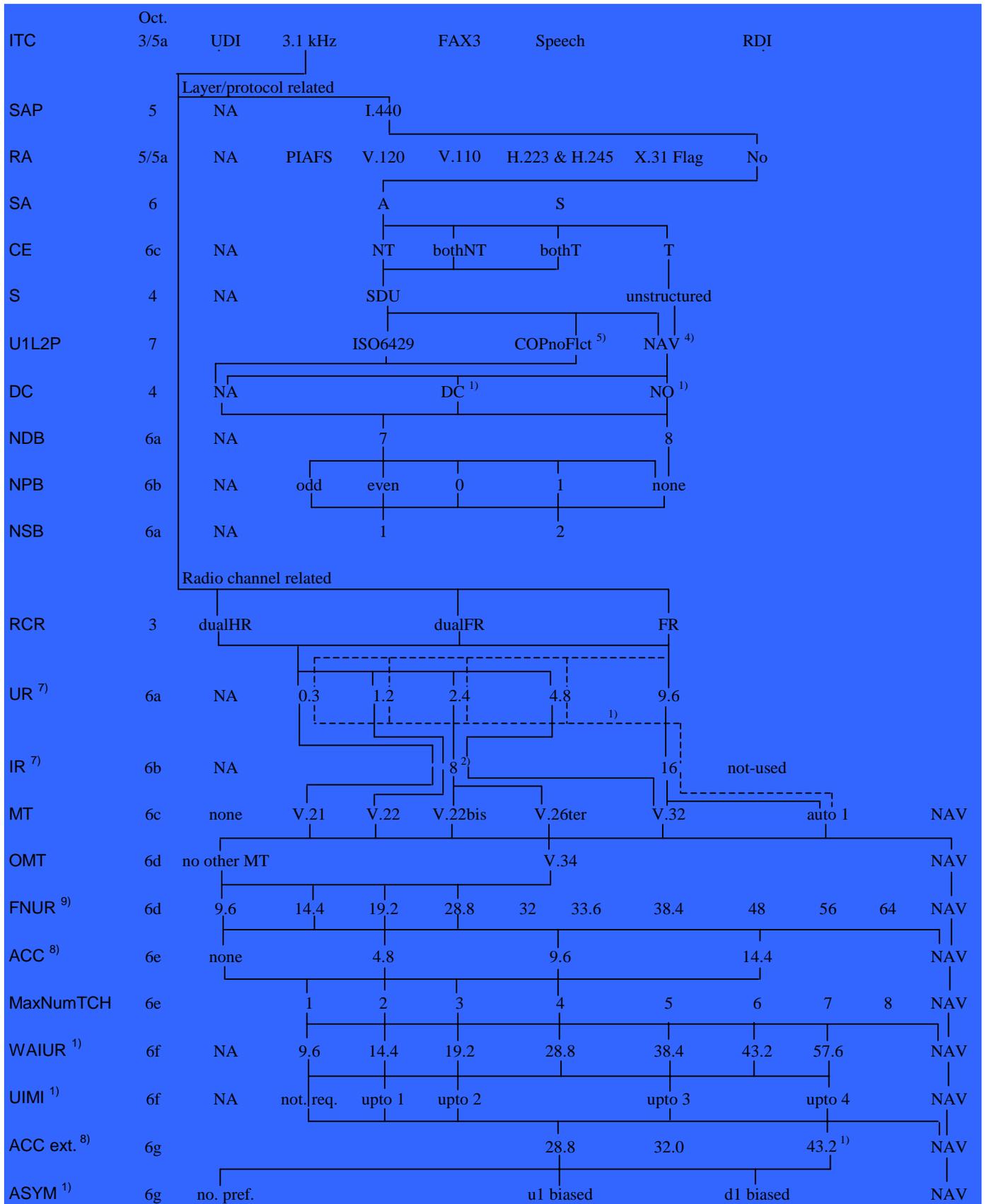




- 1) for CE:NT or "both";
- 2) for CE:T only or CE:NT and NIRR:6kb/s (not for the SETUP message);
- 3) Void;
- 4) for MT CALLS in the SETUP message or MO/MT CALLS with "out-band" flow control requested;
- 5) for MO/MT CALLS with no flow control requested;
- 6) Void;
- 7) the V.120 relevant BC parameters (octet 5b) shall be set according to the LLC (see clause B.2);
- 8) IR and UR are overridden by FNUR, ACC and MaxNumTCH;
- 9) ACC may have several values simultaneously (bit map coding).

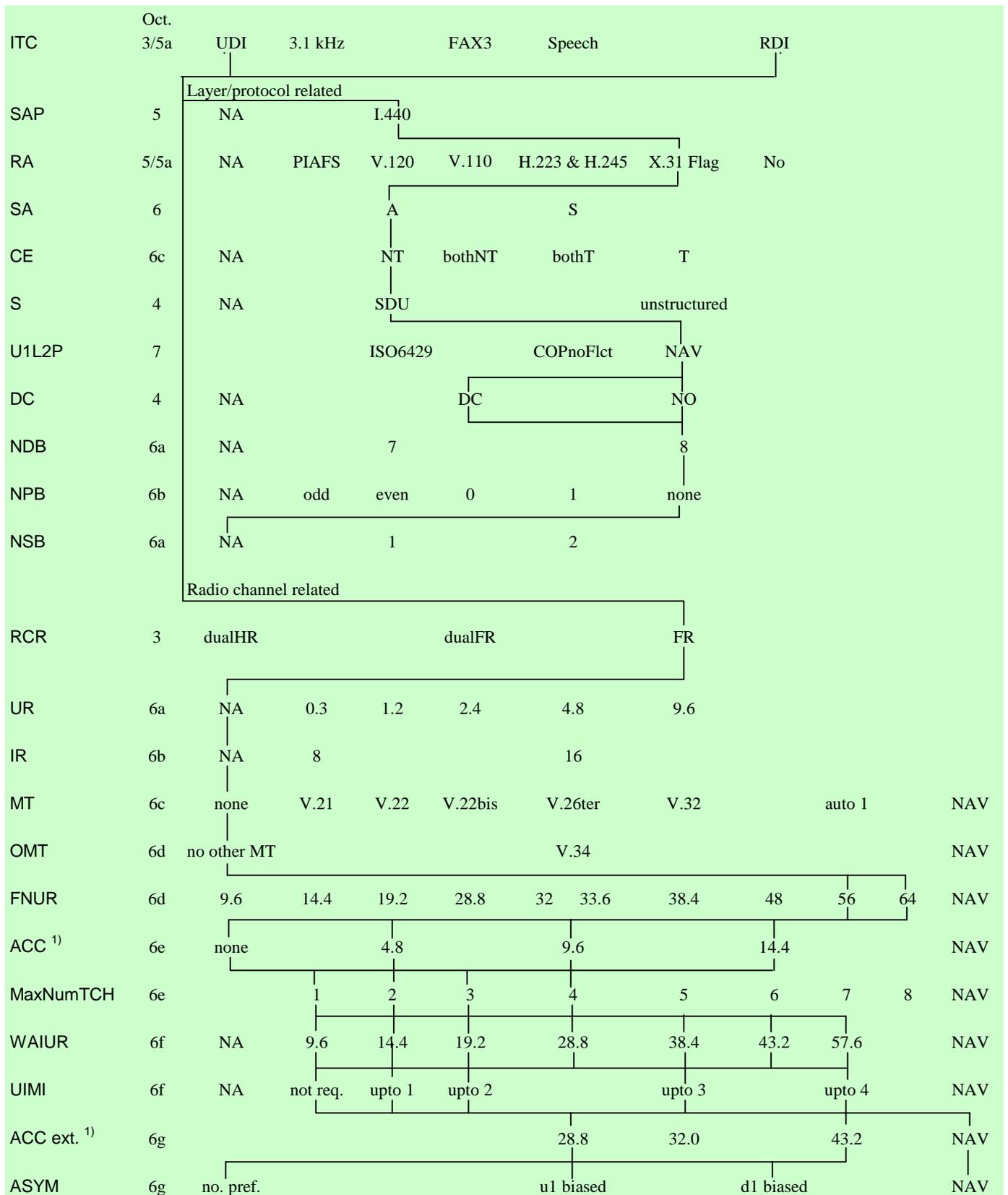
B.1.2.2 3,1 kHz audio ex-PLMN information transfer capability

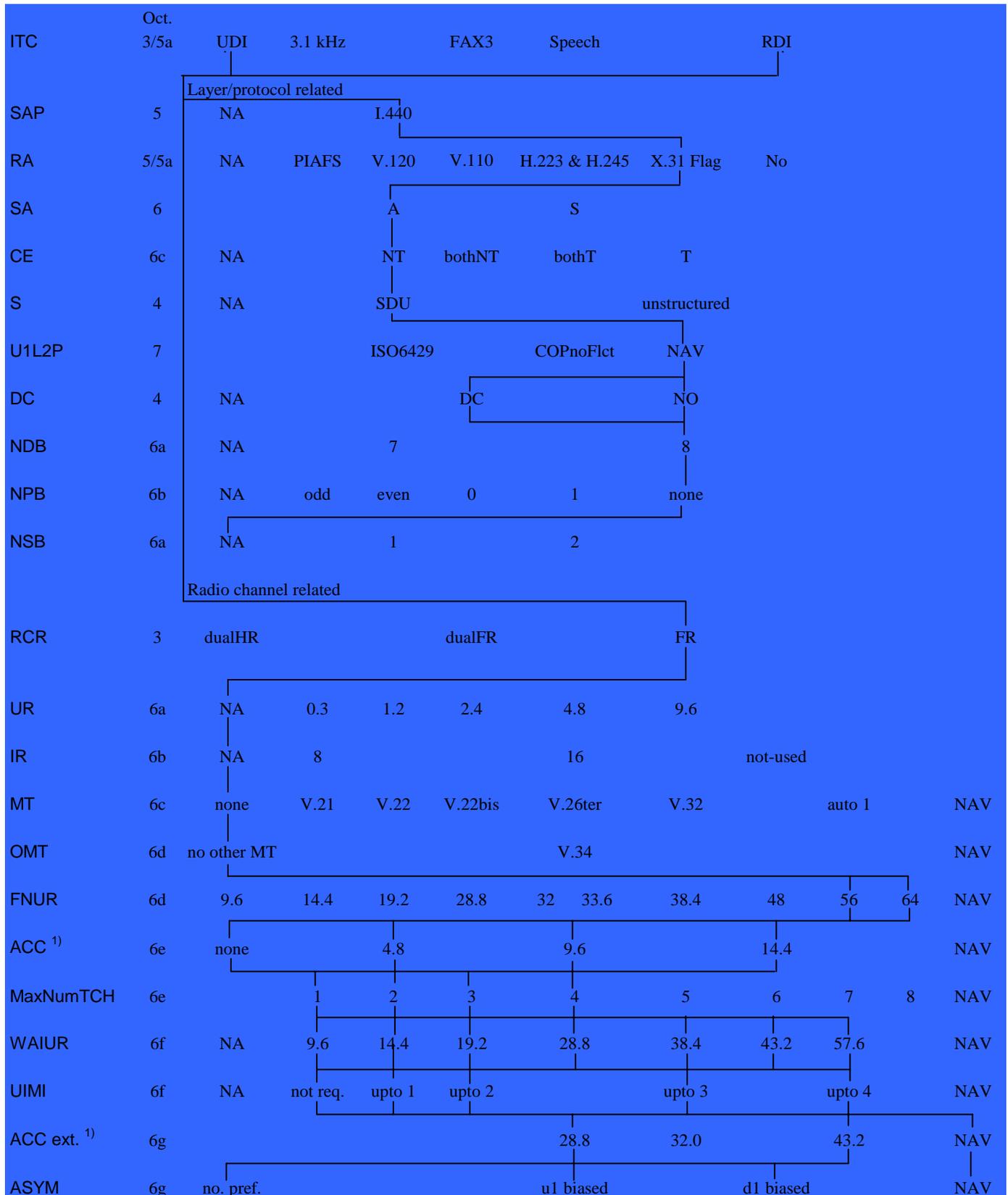




- 1) for CE:NT or "both";
- 2) for CE:T only or CE:NT and NIRR:6kb/s (not for the SETUP message);
- 3) Void;
- 4) for MT CALLS in the SETUP message or MO/MT CALLS with "out-band" flow control requested (not for V.21 modem type);
- 5) for MO/MT CALLS with no flow control requested;
- 6) Void;
- 7) IR and UR are overridden by FNUR, ACC and MaxNumTCH.
- 8) ACC may have several values simultaneously (bit map coding).
- 9) in case of MT = auto1 the value of FNUR has no meaning.

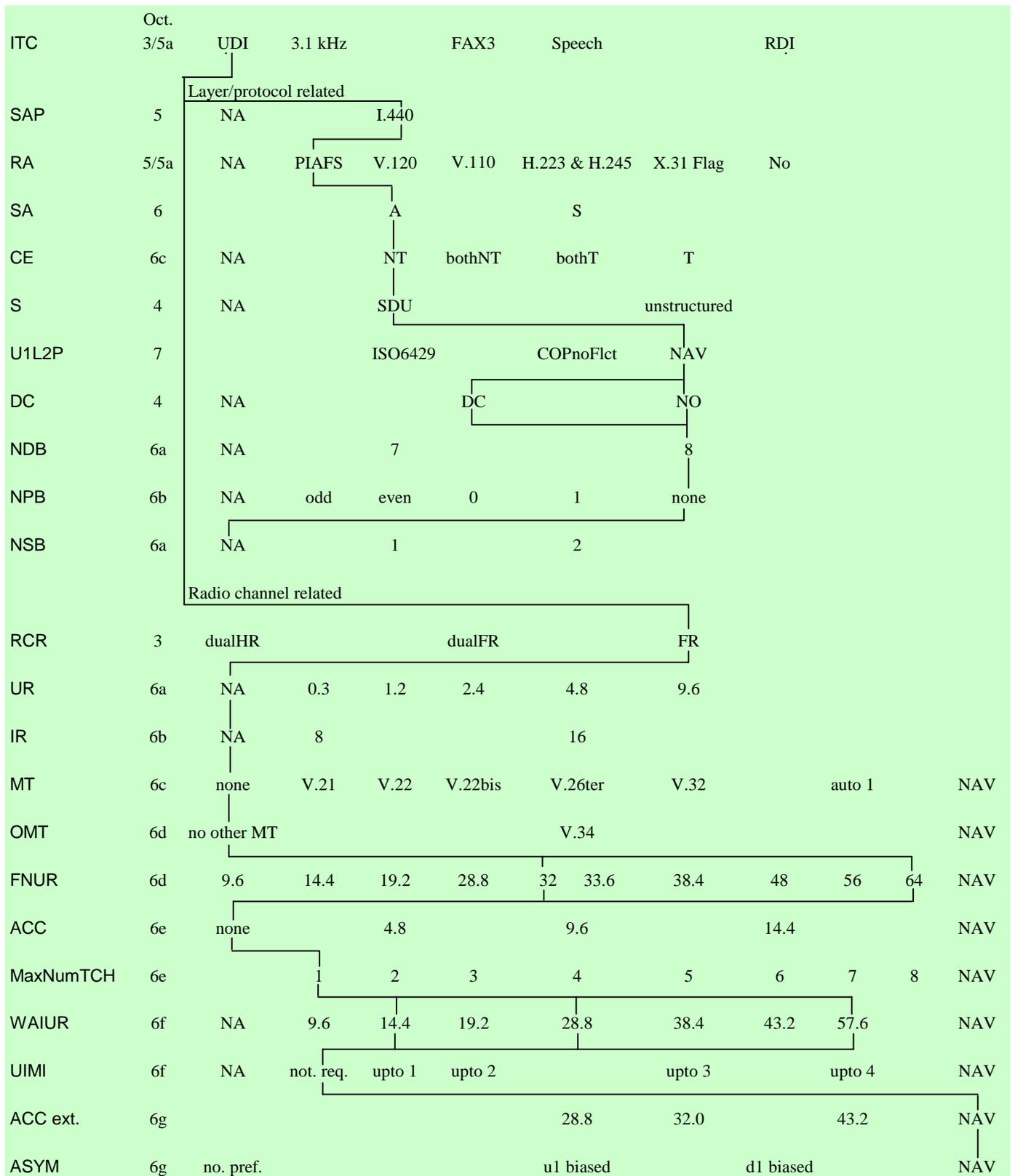
B.1.2.3 Frame Tunnelling Mode

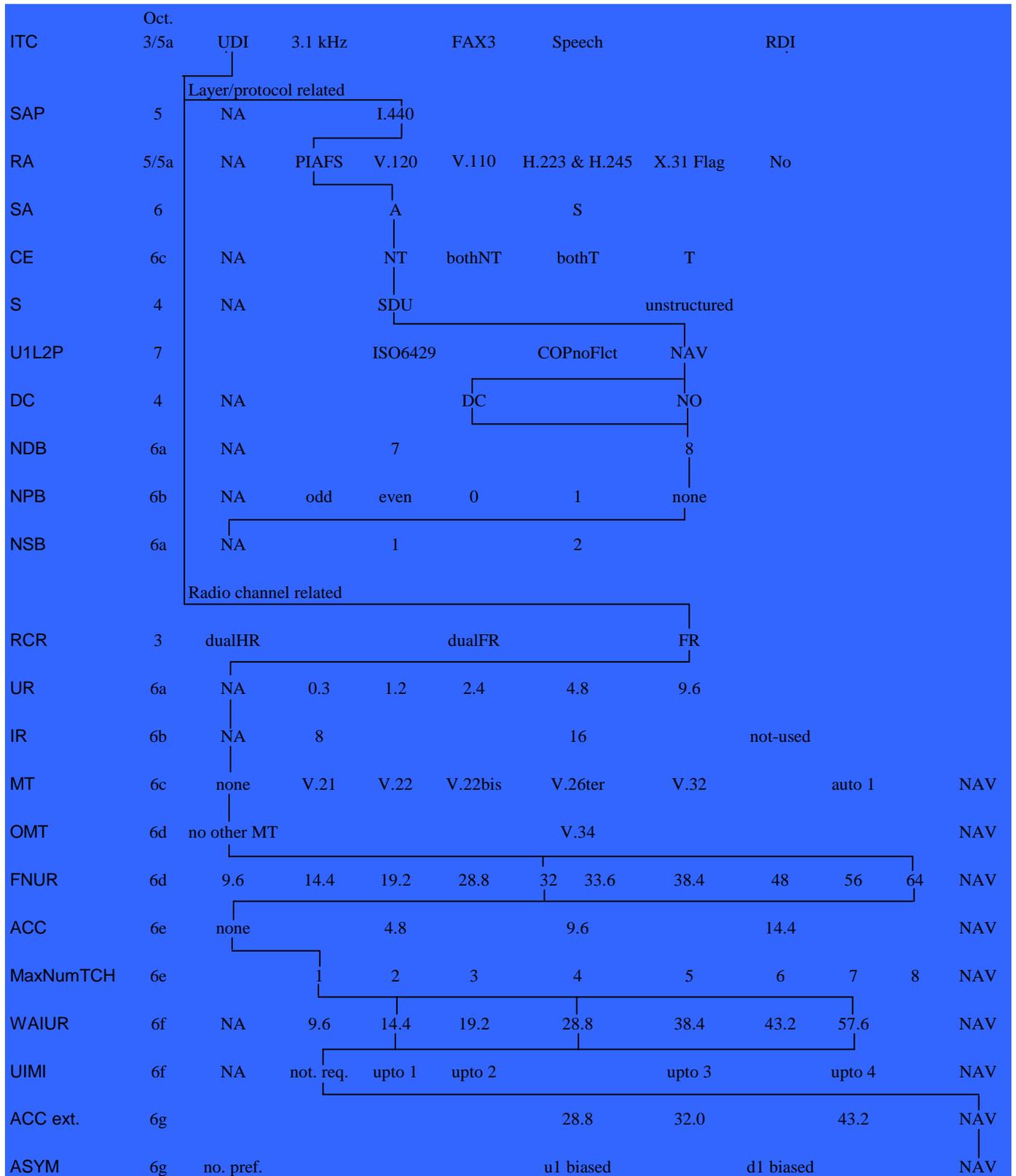




1) ACC may have several values simultaneously (bit map coding).

B.1.2.4 PIAFS



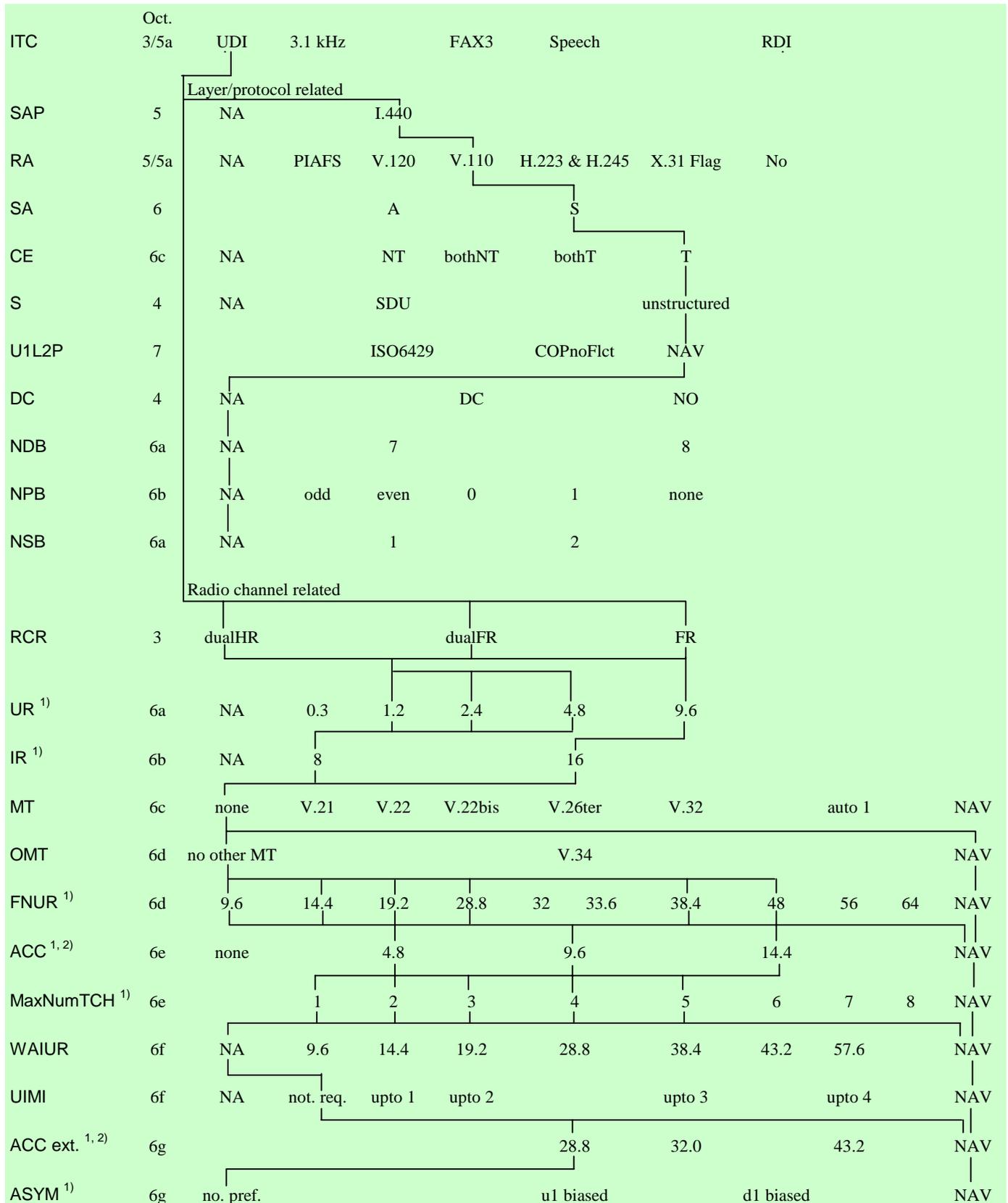


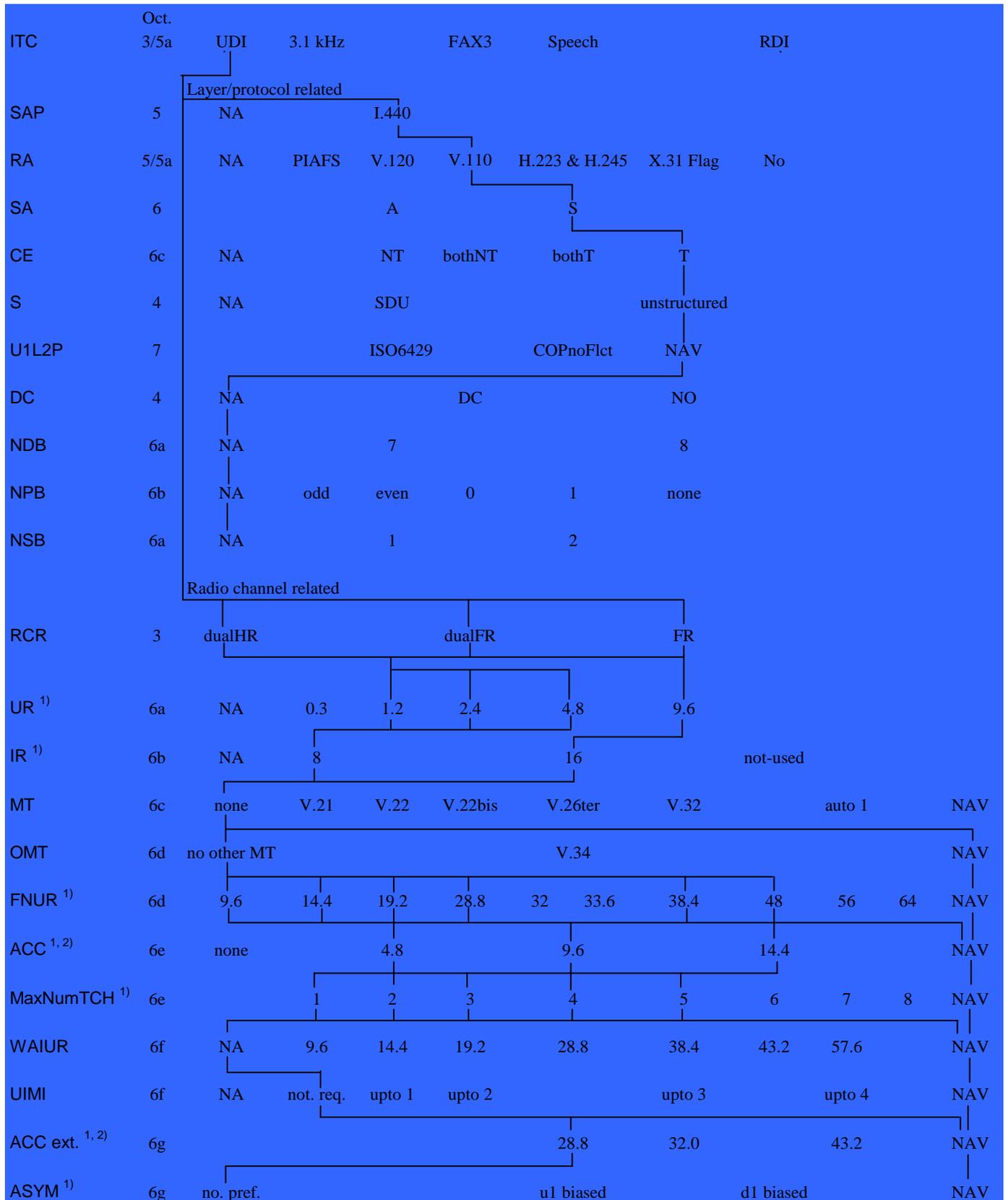
B.1.3 Bearer Service 30, Data Circuit Duplex Synchronous

B.1.3.1 Unrestricted/restricted digital information transfer capability

B.1.3.1.1 Transparent FNUR ≤ 48 kbit/s (TCH/F4.8, TCH/F9.6, TCH/14.4, TCH/F28.8)

Applies to GSM/GERAN only. No HO to/from UTRAN





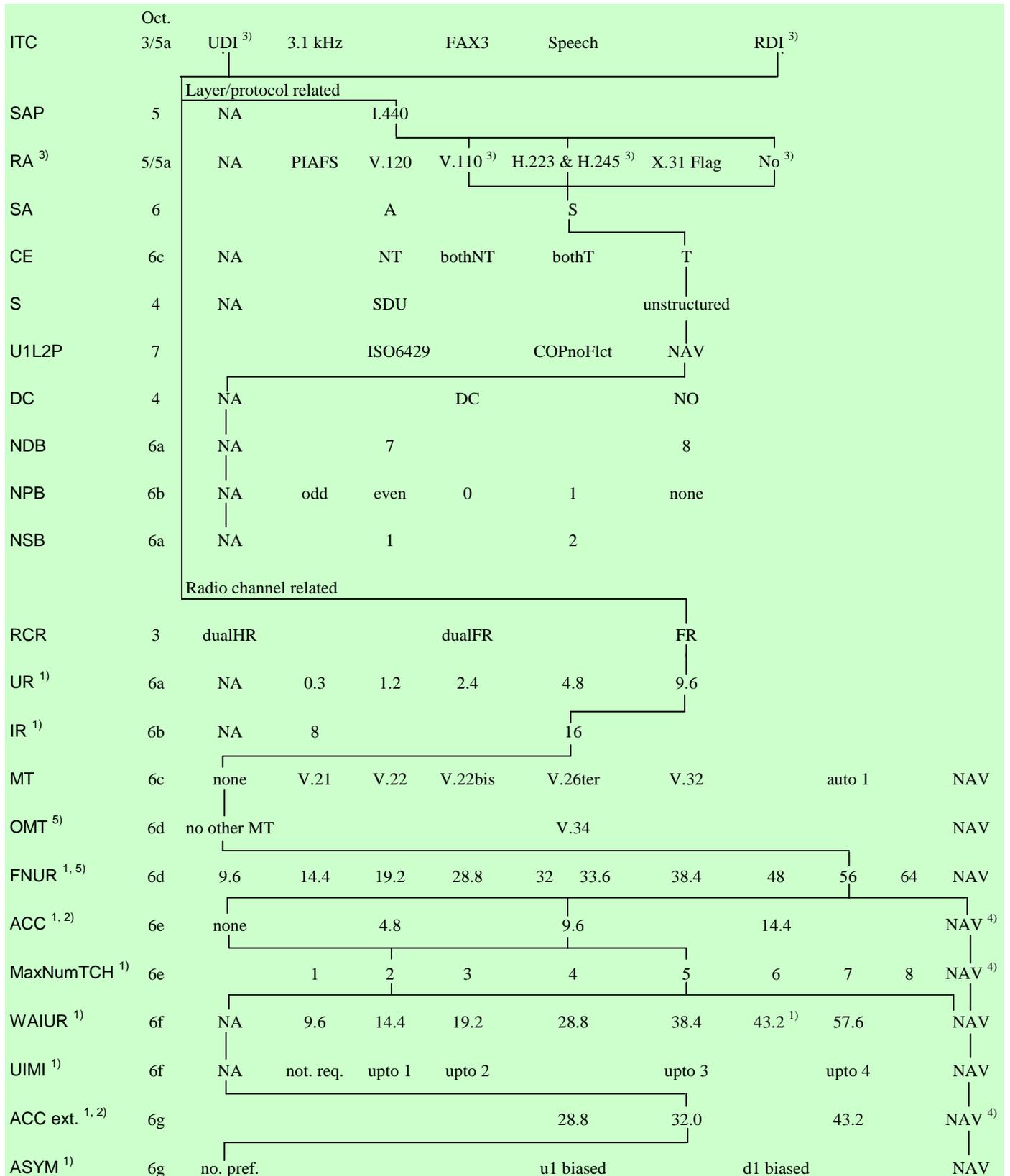
1) IR and UR are overridden by FNUR, ACC and MaxNumTCH.

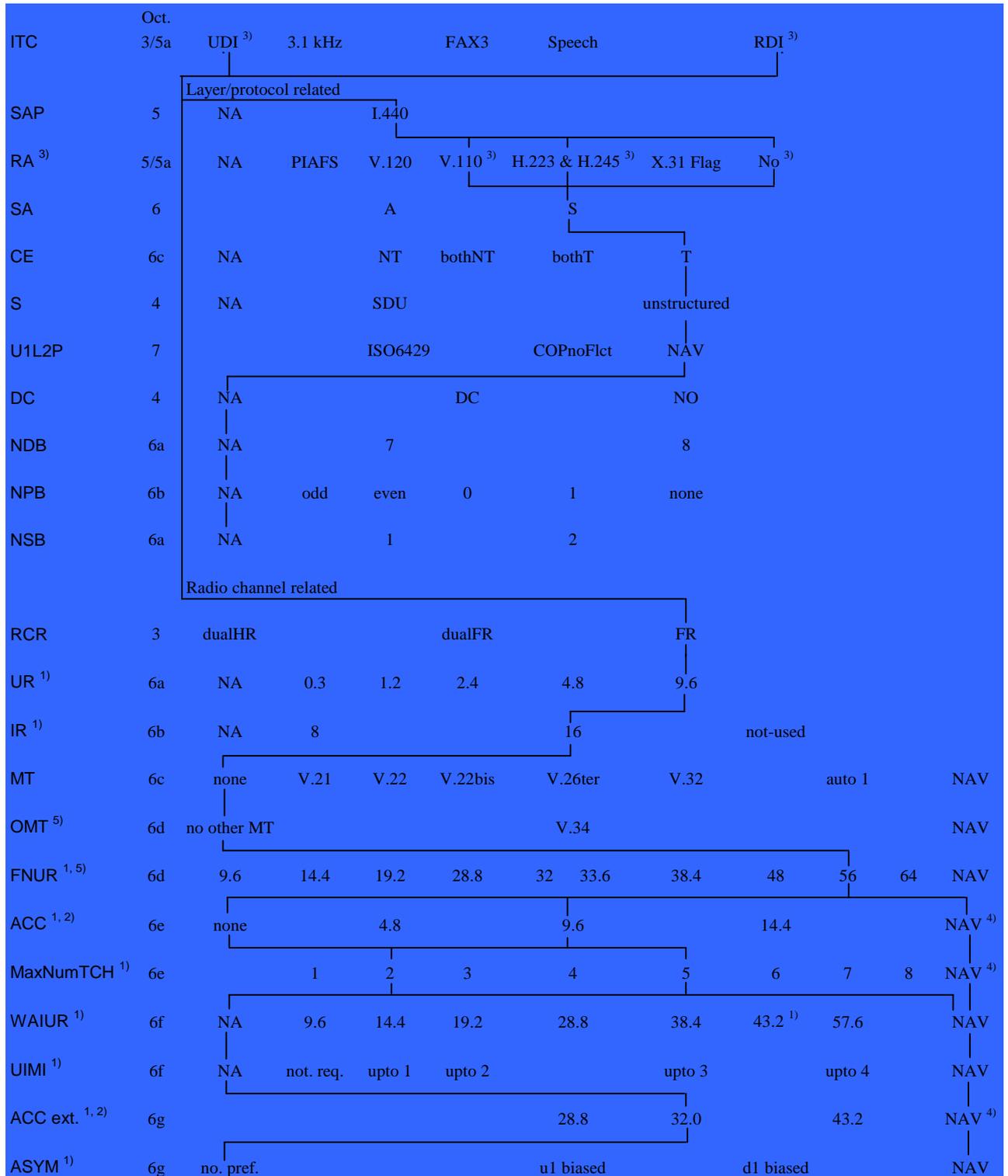
2) ACC may have several values simultaneously (bit map coding).

B.1.3.1.2 X.32 Case

Void.

B.1.3.1.3 Transparent FNUR=56 kbit/s, including 3G-H.324/M, (TCH/F9.6, TCH/F32.0, UTRAN)

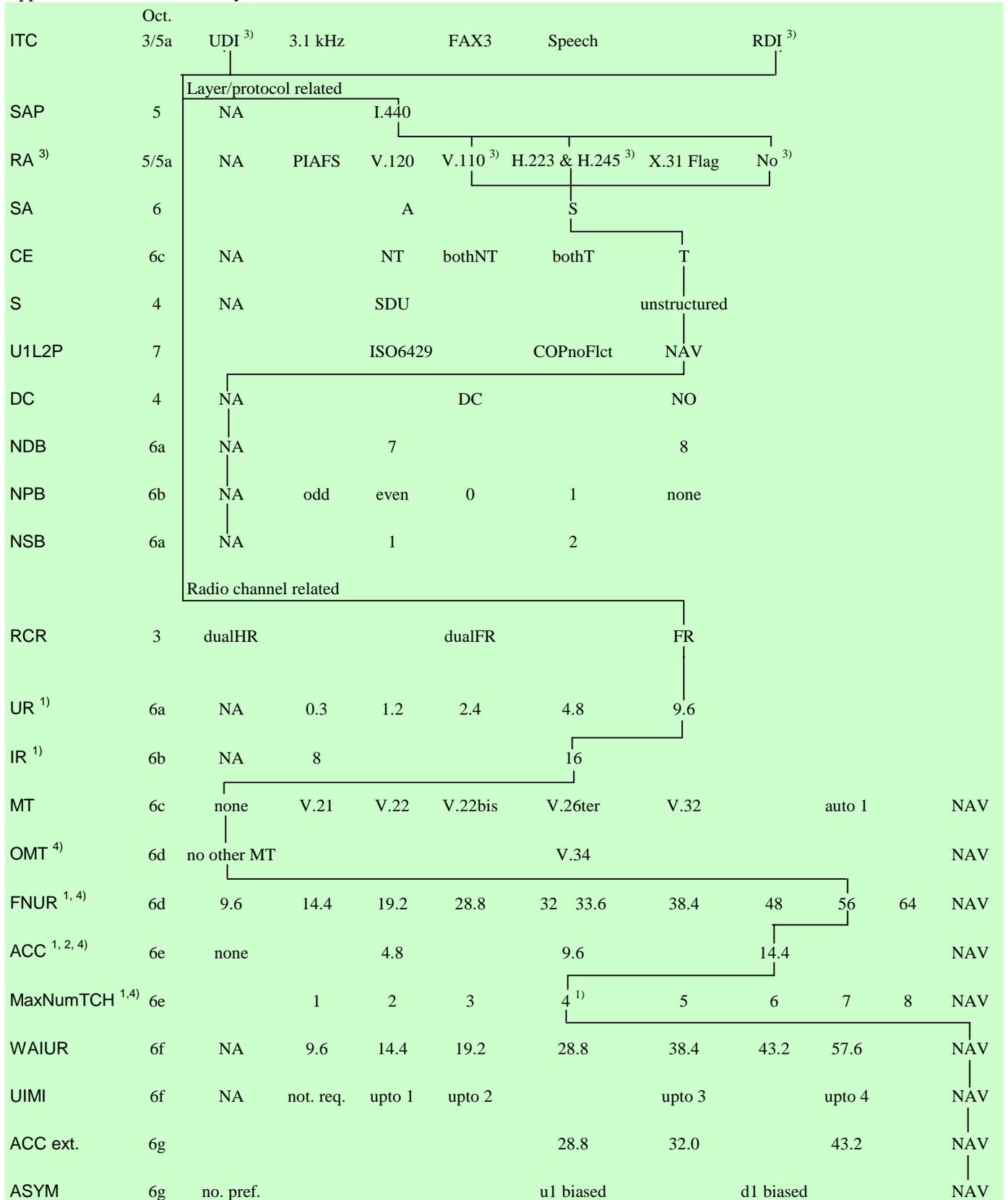




- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH. IR and UR are not applicable to UMTS.
- 2) ACC may have several values simultaneously (bit map coding). However, handover to/from UTRAN is not possible if the network assigns other traffic channels than TCH/F9.6 or TCH/F32.0.
- 3) In case ITC=UDI, RA shall be set to V.110. In case ITC=RDI, RA shall be set to H.223 & H.245 or No.
- 4) In case ACC and MaxNumTCH are not available operation is restricted to UTRAN.
- 5) The parameters FNUR and OMT are mandatory for this service.

B.1.3.1.4 Transparent FNUR = 56kbit/s, including 3G-H.324/M (TCH/F14.4)

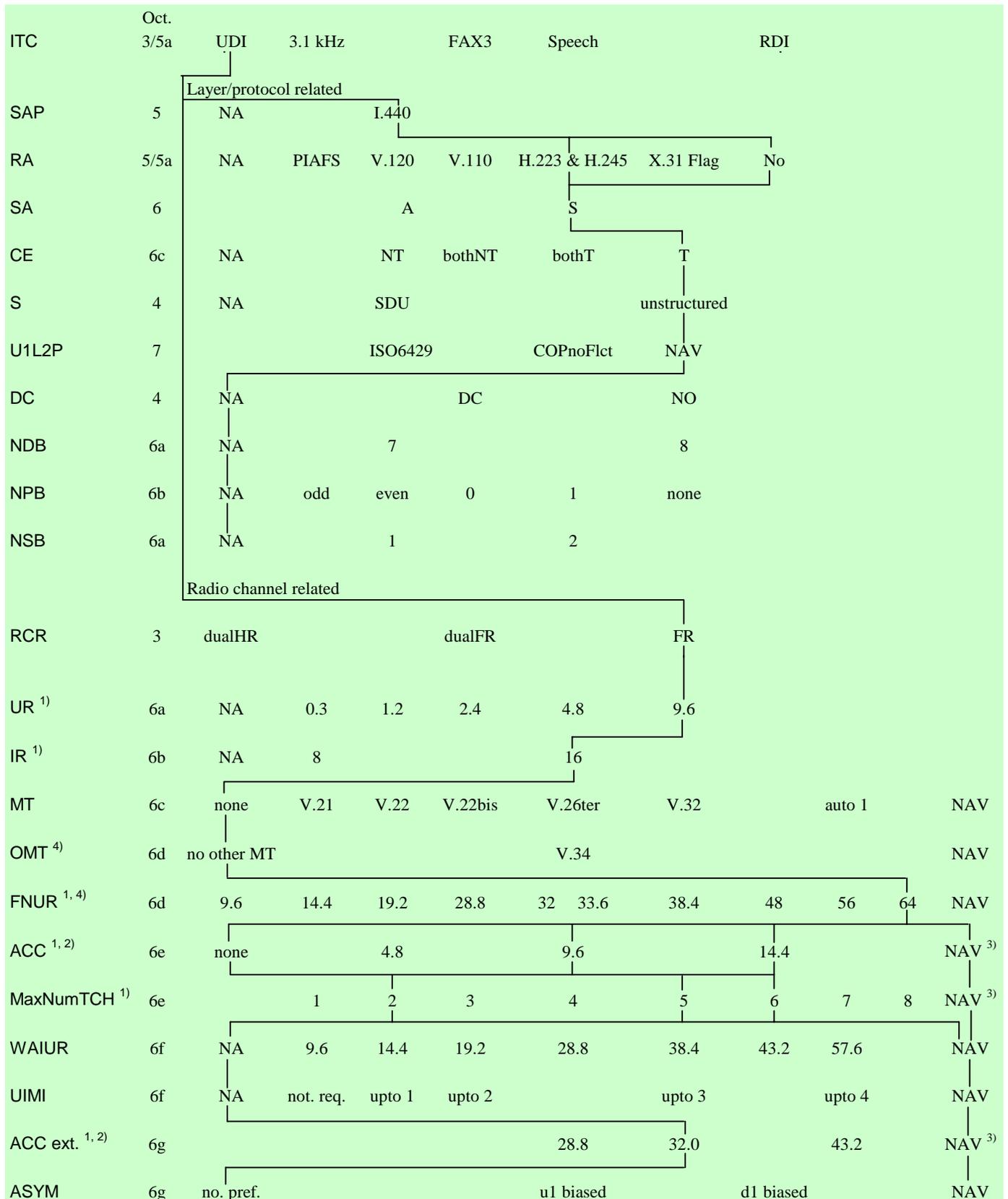
Applies to GSM/GERAN only, no HO to/from UTRAN

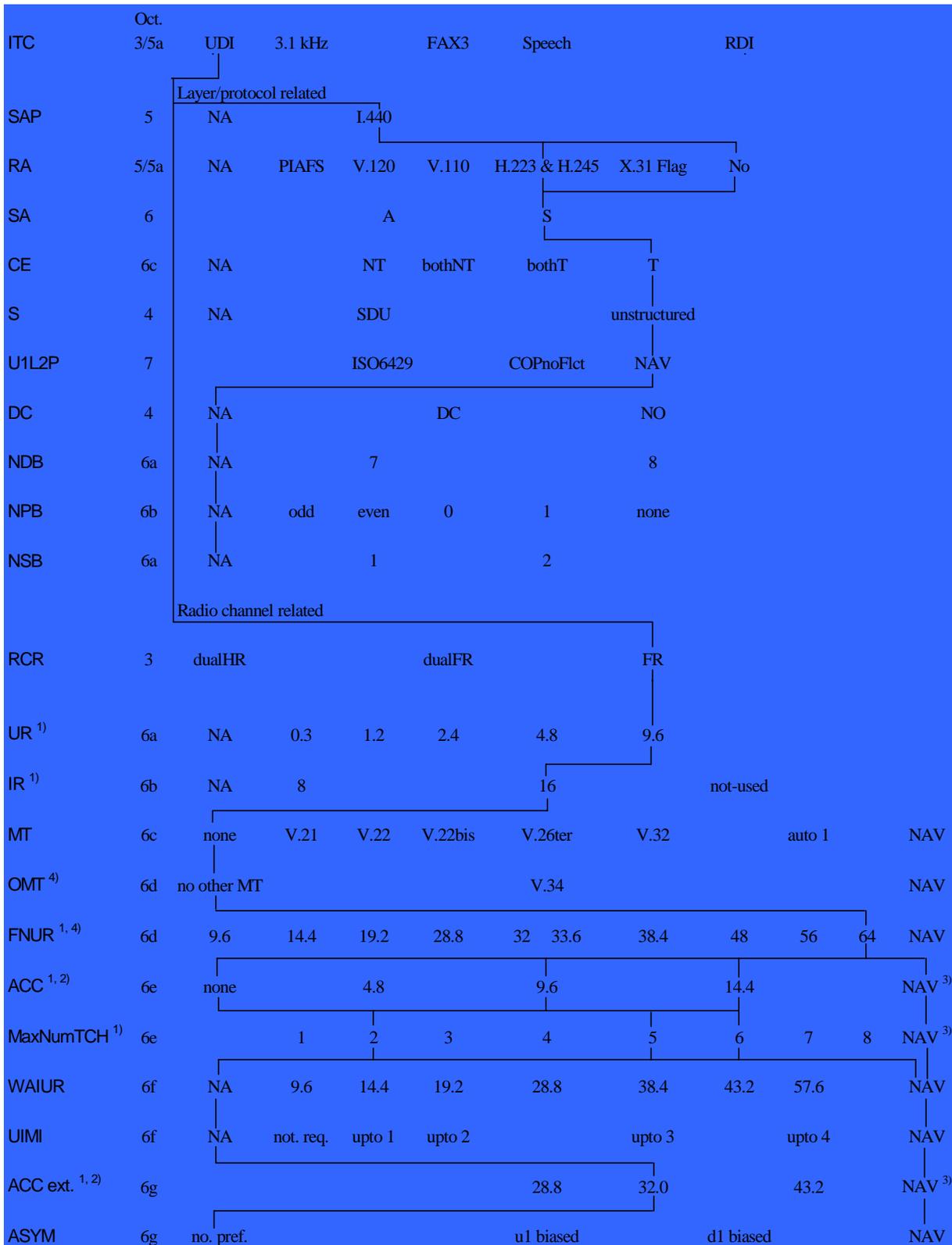


	Oct.	UDI ³⁾	3.1 kHz	FAX3	Speech	RDI ³⁾						
ITC	3/5a											
Layer/protocol related												
SAP	5	NA		I.440								
RA ³⁾	5/5a	NA	PIAFS	V.120	V.110 ³⁾	H.223 & H.245 ³⁾	X.31 Flag	No ³⁾				
SA	6			A	S							
CE	6c	NA		NT	bothNT	bothT	T					
S	4	NA		SDU	unstructured							
U1L2P	7			ISO6429	COPnoF1ct		NAV					
DC	4	NA			DC	NO						
NDB	6a	NA		7	8							
NPB	6b	NA	odd	even	0	1	none					
NSB	6a	NA		1	2							
Radio channel related												
RCR	3	dualHR			dualFR	FR						
UR ¹⁾	6a	NA	0.3	1.2	2.4	4.8	9.6					
IR ¹⁾	6b	NA	8				16	not-used				
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1	NAV			
OMT ⁴⁾	6d	no other MT					V.34	NAV				
FNUR ^{1,4)}	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV
ACC ^{1,2,4)}	6e	none	4.8			9.6		14.4		NAV		
MaxNumTCH ^{1,4)}	6e		1	2	3	4 ¹⁾	5	6	7	8	NAV	
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6	NAV		
UIMI	6f	NA	not. req.	upto 1	upto 2	upto 3		upto 4		NAV		
ACC ext.	6g					28.8	32.0	43.2		NAV		
ASYM	6g	no. pref.				u1 biased		d1 biased		NAV		

- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH.
- 2) ACC may have several values simultaneously (bit map coding).
- 3) In case ITC=UDI, RA shall be set to V.110. In case ITC=RDI, RA shall be set to H.223 & H.245 or No.
- 4) The parameters FNUR, OMT, ACC and MaxNumTCH are mandatory for this service.

B.1.3.1.5 Transparent FNUR = 64kbit/s, including 3G-H.324/M (TCH/F9.6, TCH/F14.4, TCH/F32.0, UTRAN))





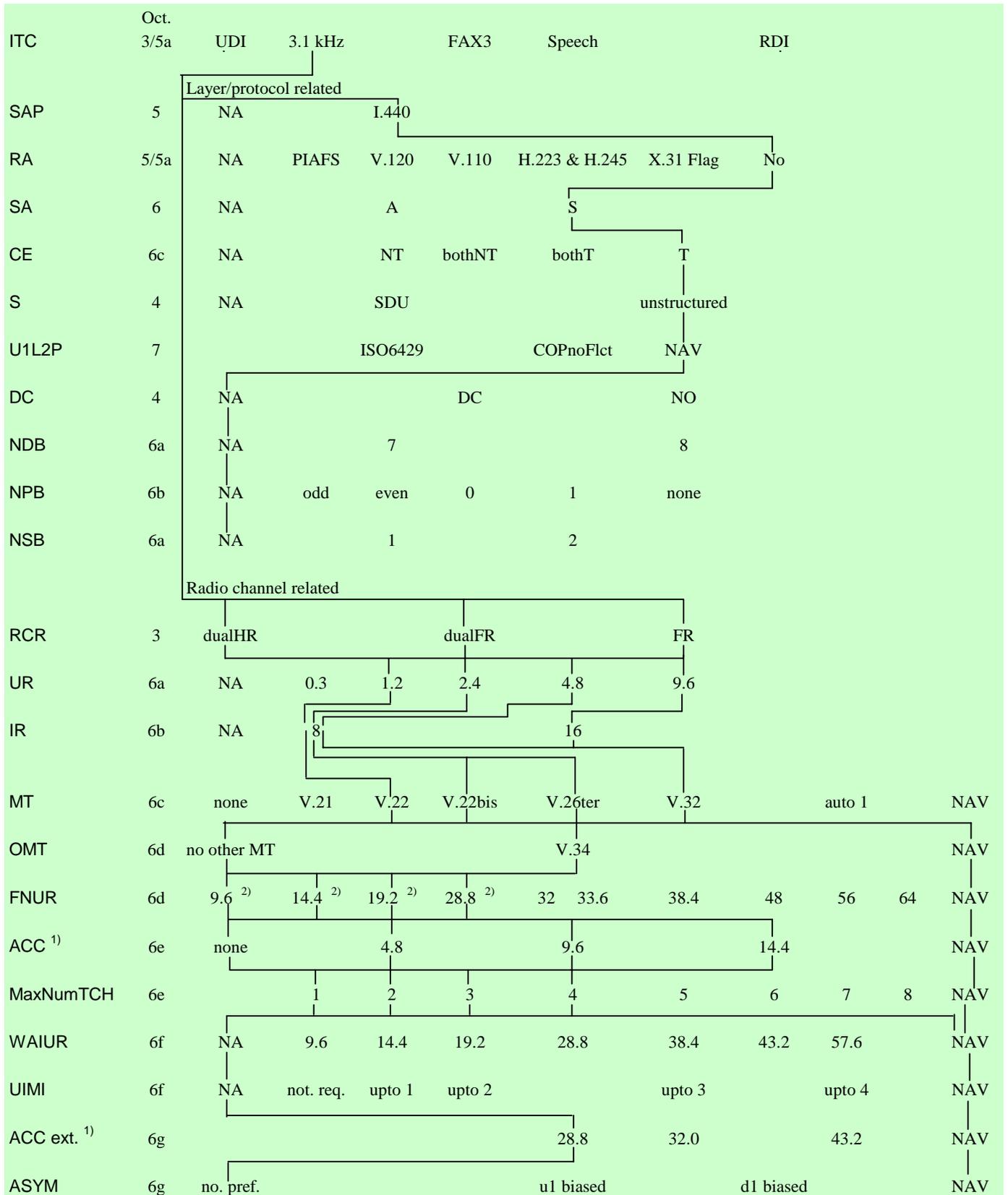
- 1) IR and UR are overridden by FNUR, ACC and MaxNumTCH. IR and UR are not applicable to UMTS.
- 2) ACC may have several values simultaneously (bit map coding).
- 3) If ACC and MaxNumTCH are not available operation is restricted to UTRAN.
- 4) The parameters FNUR and OMT are mandatory for this service.

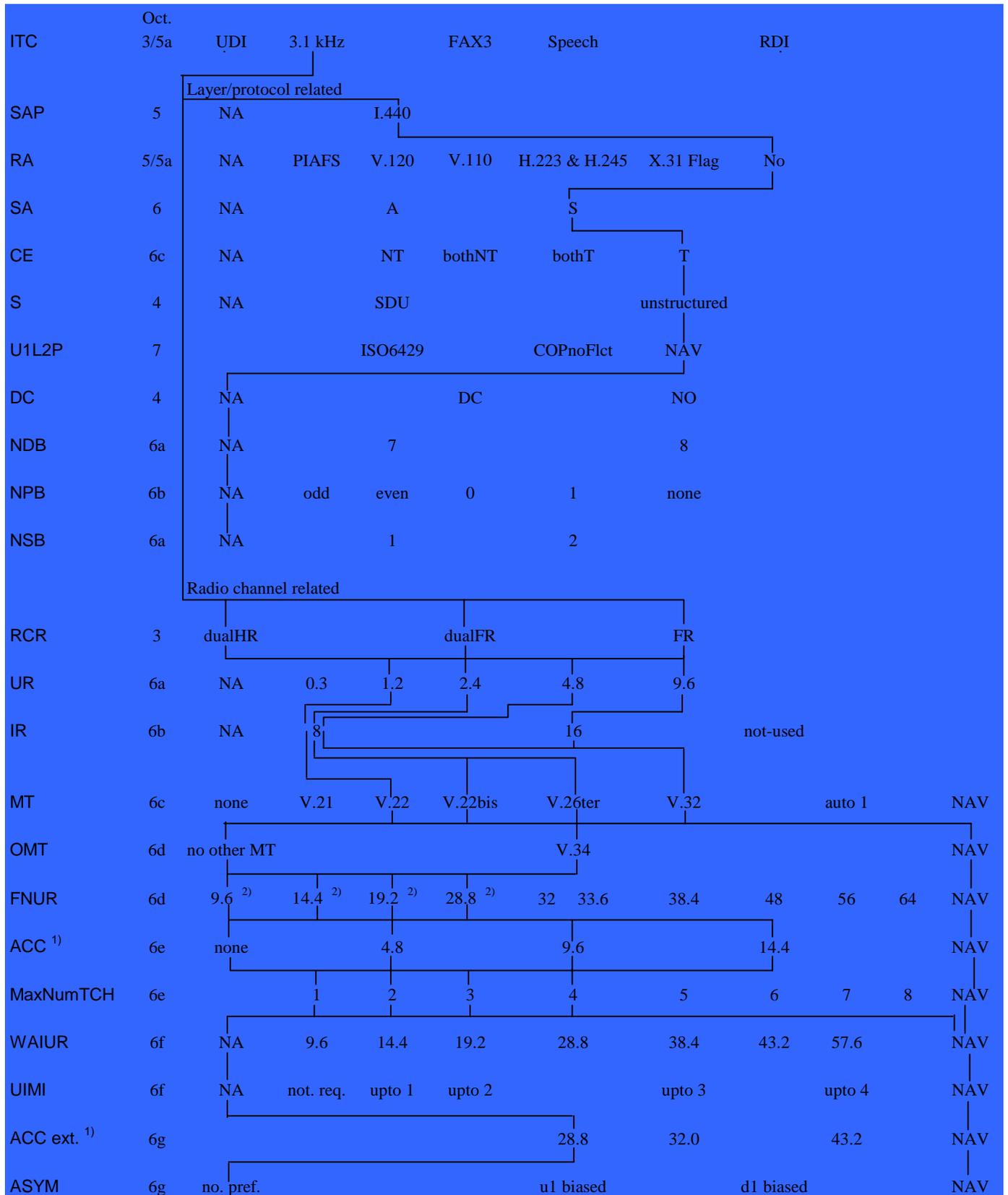
End of first amended section

Start of second amended section

B.1.3.2 3,1 kHz audio ex-PLMN information transfer capability

B.1.3.2.1 Non-X.32 Cases



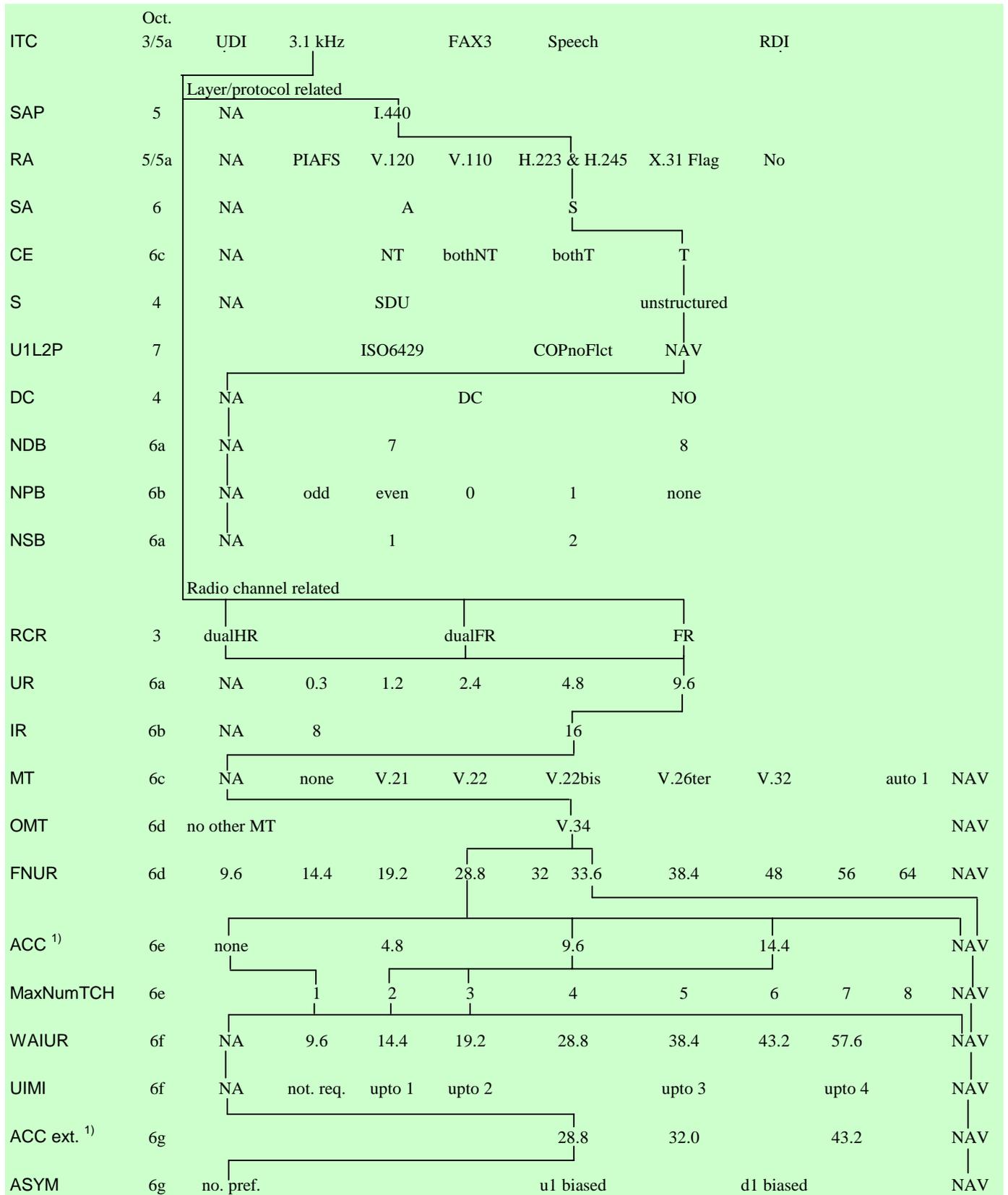


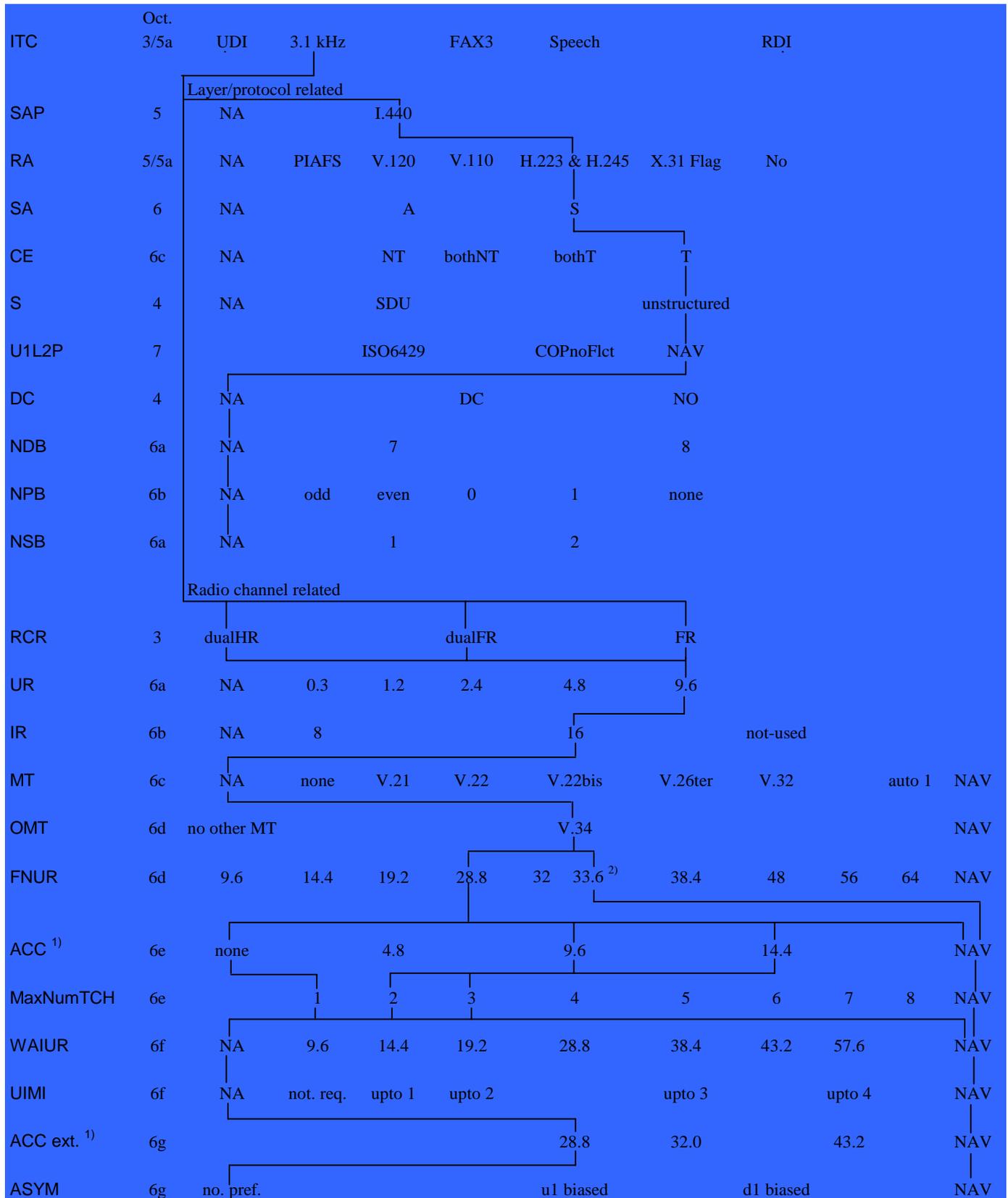
1) ACC may have several values simultaneously (bit map coding).

B.1.3.2.2 X.32 Case

Void.

B.1.3.2.3 3G-H.324/M Case





1) ACC may have several values simultaneously (bit map coding).

2) FNUR 33.6 kbit/s applies to UTRAN only.

B.1.4 Bearer Service 40 ... 46, PAD Access Asynchronous

Void.

B.1.5 Bearer Service 50 ... 53 ,Data Packet Duplex Synchronous, Unrestricted digital information transfer capability

Void.

B.1.6 Bearer Service 61, Alternate Speech/Data

Void.

B.1.7 Bearer Service 81, Speech followed by Data

Void.

B.1.8 Teleservice 11 ... 12, Speech

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3			Speech	RDI			
Layer/protocol related											
SAP	5	NA		I.440							NAV
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No			NAV
SA	6	NA		A			S				NAV
CE	6c	NA		NT	bothNT		bothT	T			NAV
S	4	NA		SDU				unstructured			NAV
U1L2P	7			ISO6429			COPnoFlct				NAV
DC	4	NA			DC			NO			NAV
NDB	6a	NA		7				8			NAV
NPB	6b	NA	odd	even	0	1		none			NAV
NSB	6a	NA		1		2					NAV
Radio channel related											
RCR	3	dualHR			dualFR		FR				
UR	6a	NA	0.3	1.2	2.4	4.8	9.6				NAV
IR	6b	NA	8			16					NAV
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32		auto 1		NAV
OMT	6d	no other MT				V.34					NAV
FNUR	6d	9.6	14.4	19.2	28.8	32 33.6	38.4	48	56	64	NAV
ACC	6e	none		4.8		9.6		14.4			NAV
MaxNumTCH	6e		1	2	3	4	5	6	7	8	NAV
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6		NAV
UIMI	6f	NA	not. req.	upto 1	upto 2		upto 3		upto 4		NAV
ACC ext.	6g					28.8	32.0		43.2		NAV
ASYM	6g	no. pref.					u1 biased		d1 biased		NAV

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI							
Layer/protocol related													
SAP	5	NA	I.440									NAV	
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No				NAV	
SA	6	NA	A	S								NAV	
CE	6c	NA	NT	bothNT	bothT	T					NAV		
S	4	NA	SDU	unstructured								NAV	
U1L2P	7	ISO6429		COPnoFlct								NAV	
DC	4	NA	DC			NO					NAV		
NDB	6a	NA	7	8								NAV	
NPB	6b	NA	odd	even	0	1	none					NAV	
NSB	6a	NA	1	2								NAV	
Radio channel related													
RCR	3	dualHR	dualFR			FR						NAV	
UR	6a	NA	0.3	1.2	2.4	4.8	9.6					NAV	
IR	6b	NA	8	16								not-used	NAV
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1			NAV		
OMT	6d	no other MT				V.34						NAV	
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV	
ACC	6e	none	4.8			9.6			14.4			NAV	
MaxNumTCH	6e	1		2	3	4	5	6	7	8		NAV	
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6			NAV	
UIMI	6f	NA	not. req.	upto 1	upto 2		upto 3			upto 4		NAV	
ACC ext.	6g						28.8	32.0	43.2			NAV	
ASYM	6g	no. pref.				u1 biased			d1 biased			NAV	

B.1.9 Teleservice 21 ... 23, Short Message

Not applicable.

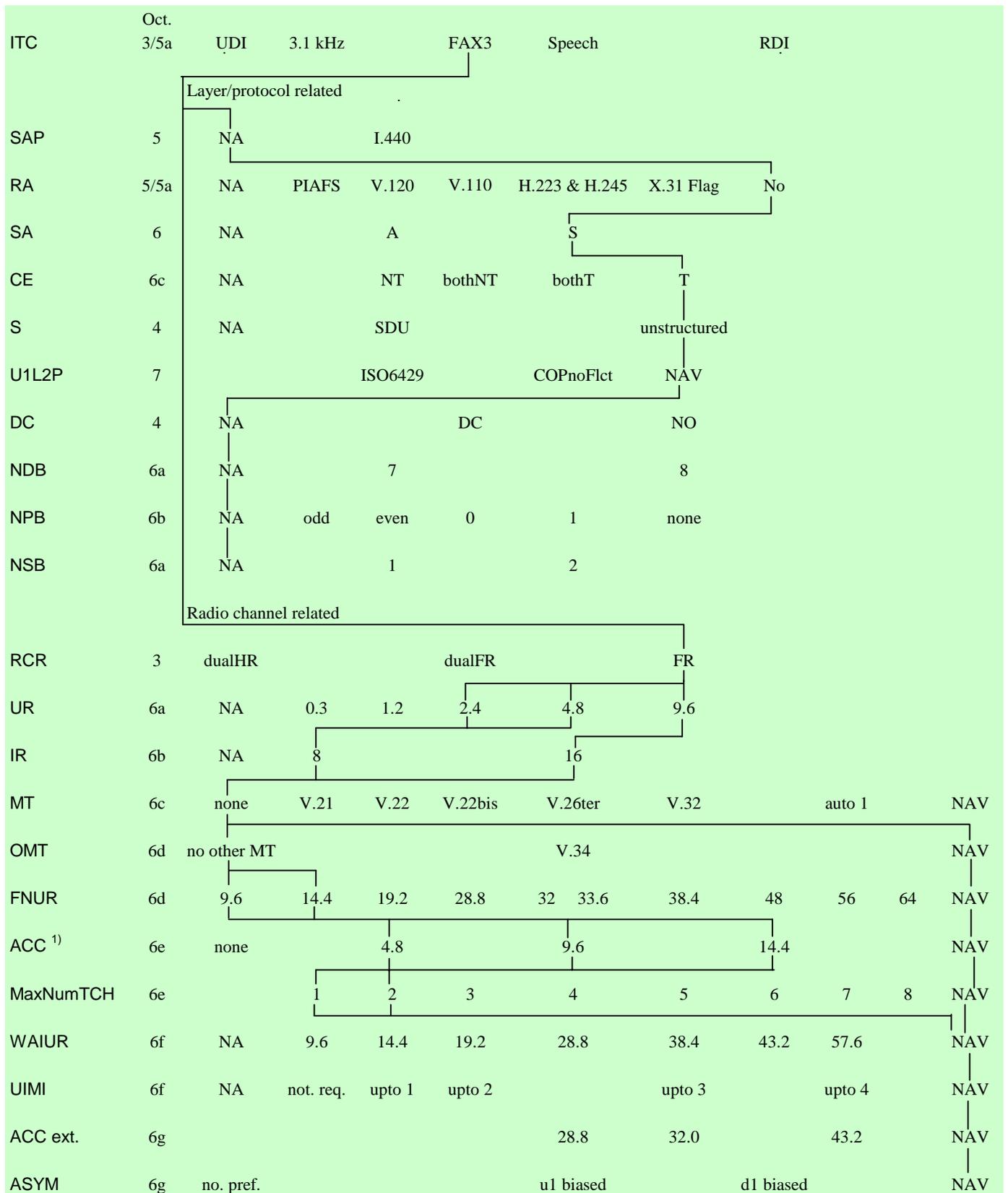
B.1.10 Teleservice 61, Alternate Speech and Facsimile group 3

The information element of the "repeat indicator" is set to the value "circular for successive selection (alternate)".

B.1.10.1 Teleservice 61, Speech

Ref. subclause B.1.8.

B.1.10.2 Teleservice 61, Facsimile group 3 in GSM



ITC	Oct.	UDI	3.1 kHz	FAX3	Speech	RDI						
		Layer/protocol related										
SAP	5	NA	I.440									
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No				
SA	6	NA	A		S							
CE	6c	NA	NT	bothNT	bothT		T					
S	4	NA	SDU				unstructured					
U1L2P	7		ISO6429		COPnoFlct		NAV					
DC	4	NA		DC			NO					
NDB	6a	NA	7				8					
NPB	6b	NA	odd	even	0	1	none					
NSB	6a	NA	1		2							
		Radio channel related										
RCR	3	dualHR		dualFR		FR						
UR	6a	NA	0.3	1.2	2.4	4.8	9.6					
IR	6b	NA	8			16		not-used				
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1	NAV			
OMT	6d	no other MT				V.34			NAV			
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV
ACC ¹⁾	6e	none		4.8		9.6		14.4				NAV
MaxNumTCH	6e		1	2	3	4	5	6	7	8		NAV
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6			NAV
UIMI	6f	NA	not. req.	upto 1	upto 2		upto 3		upto 4			NAV
ACC ext.	6g					28.8	32.0		43.2			NAV
ASYM	6g	no. pref.					u1 biased		d1 biased			NAV

1) ACC may have several values simultaneously (bit map coding).

B.1.10.3 Teleservice 61, Facsimile group 3 in UMTS

ITC	Oct.	UDI	3.1 kHz	FAX3	Speech	RD1						
		Layer/protocol related										
SAP	5	NA	I.440									
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No				
SA	6	NA		A		S						
CE	6c	NA		NT	bothNT	bothT	T					
S	4	NA		SDU			unstructured					
U1L2P	7		ISO6429			COPnoFlct ³⁾	NAV					
DC	4	NA			DC		NO					
NDB	6a	NA		7			8					
NPB	6b	NA	odd	even	0	1	none					
NSB	6a	NA		1		2						
		Radio channel related										
RCR	3	dualHR			dualFR		FR					
UR	6a	NA	0.3	1.2	2.4	4.8	9.6				NAV	
IR	6b	NA	8			16					NAV	
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32		auto 1		NAV	
OMT	6d	no other MT				V.34					NAV	
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV
ACC	6e	none		4.8		9.6			14.4			NAV
MaxNumTCH	6e		1	2	3	4	5	6	7	8	NAV	
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6		NAV	
UIMI	6f	NA	not. req.	upto 1	upto 2		upto 3		upto 4		NAV	
ACC ext.	6g					28.8	32.0		43.2		NAV	
ASYM	6g	no. pref.					u1 biased		d1 biased		NAV	

ITC	Oct.	UDI	3.1 kHz	FAX3	Speech	RDI					
		Layer/protocol related									
SAP	5	NA		I.440							
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No			
SA	6	NA		A		S					
CE	6c	NA		NT	bothNT	bothT	T				
S	4	NA		SDU			unstructured				
U1L2P	7			ISO6429		COPnoFlct ³⁾	NAV				
DC	4	NA			DC		NO				
NDB	6a	NA		7			8				
NPB	6b	NA	odd	even	0	1	none				
NSB	6a	NA		1		2					
		Radio channel related									
RCR	3	dualHR			dualFR		FR				
UR	6a	NA	0.3	1.2	2.4	4.8	9.6				
IR	6b	NA	8			16		not-used			
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1		NAV	
OMT	6d	no other MT				V.34				NAV	
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64
ACC	6e	none		4.8		9.6		14.4			NAV
MaxNumTCH	6e		1	2	3	4	5	6	7	8	NAV
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6		NAV
UIMI	6f	NA	not. req.	upto 1	upto 2		upto 3		upto 4		NAV
ACC ext.	6g					28.8	32.0		43.2		NAV
ASYM	6g	no. pref.					u1 biased		d1 biased		NAV

End of second and last amended section

CR-Form-v3

CHANGE REQUEST

⌘ **27.001 CR 065** ⌘ rev **1** ⌘ Current vers **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Negotiation of Rate adaptation/Other rate adaptation		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories: F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Table B.4f does not consider UDI with FNUR = 64 kbit/s. Note 22 for table 7B in 29.007 allows the setting of other parameters to values allowing "fallback service". Therefore the terminal shall also have the choice to negotiate V.110, 64kbit/s to multimedia.
Summary of change:	⌘ A new note has been introduced. Note 6 of Table B.4f covers now FNUR = 64 kbit/s.
Consequences if not approved:	⌘ Terminating 64 kbit/s UDI calls indicating no rate adaptation, e.g. an ISDN BC with 4 octets only (see note 16 table 7A in TS 29.007) has been received, can't be negotiated and must therefore be rejected.

Clauses affected:	⌘ Table B.4f	
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘
Other comments:	⌘	

*****Start of Modified Section *****

Table B.4f: Negotiation of Rate adaptation/Other rate adaptation

Mobile Terminated Call:

Bearer type	BC-parameter Rate adaptation/Other rate adaptation	
	Message SETUP	Message CALL CONF
FTM ¹⁾	V.110, I.460 and X.30	X.31 flag stuffing
PIAFS ²⁾	V.110, I.460 and X.30	PIAFS
Multimedia	V.110, I.460 and X.30 ³⁾	H.223 and H.245
	No rate adaptation ⁵⁾ <u>6)</u>	H.223 and H.245

- 1) This negotiation is possible, only if ITC=UDI or RDI, FNUR=64 or 56 kbit/s and CE=NT or "both" is signalled in the SETUP message. The MS shall signal FTM as specified in B.1.2.3.
- 2) This negotiation is possible, only if ITC=UDI, FNUR=32 kbit/s and CE= "both" is signalled in the SETUP message. The UE shall signal PIAFS as specified in B.1.2.4.
- 3) This negotiation is possible, only if ITC=UDI or RDI, FNUR=32 ,or 56 kbit/s, and CE=T or "both" is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.1.3, B.1.3.1.4 and B.1.3.1.6.
- ~~5) ~~5)~~ This negotiation is possible, ~~only~~ if ITC=3,1 kHz, FNUR=28.8 kbit/s, MT=V.34 and CE=T or "both" is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.2.3.~~
- 6) This negotiation is possible, if ITC=UDI or RDI, FNUR=64 or 56 kbit/s and CE=T is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.1.3, B.1.3.1.4, and B.1.3.1.5

*****End of Modified Section *****

CHANGE REQUEST

⌘ **27.001 CR 066** ⌘ rev **1** ⌘ Current vers **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Negotiation of Rate adaptation/Other rate adaptation		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> of the following categories: F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		

Reason for change:	⌘ Table B.4f does not consider UDI with FNUR = 64 kbit/s. Note 22 for table 7B in 29.007 allows the setting of other parameters to values allowing "fallback service". Therefore the terminal shall also have the choice to negotiate V.110, 64kbit/s to multimedia.
Summary of change:	⌘ A new note has been introduced. Note 6 of Table B.4f covers now FNUR = 64 kbit/s.
Consequences if not approved:	⌘ Terminating 64 kbit/s UDI calls indicating no rate adaptation, e.g. an ISDN BC with 4 octets only (see note 16 table 7A in TS 29.007) has been received, can't be negotiated and must therefore be rejected.

Clauses affected:	⌘ Table B.4f	
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘
Other comments:	⌘	

*****Start of Modified Section *****

Table B.4f: Negotiation of Rate adaptation/Other rate adaptation

Mobile Terminated Call:

Bearer type	BC-parameter Rate adaptation/Other rate adaptation	
	Message SETUP	Message CALL CONF
FTM ¹⁾	V.110, I.460 and X.30	X.31 flag stuffing
PIAFS ²⁾	V.110, I.460 and X.30	PIAFS
Multimedia	V.110, I.460 and X.30 ³⁾	H.223 and H.245
	No rate adaptation ⁵⁾ <u>6)</u>	H.223 and H.245

- 1) This negotiation is possible, only if ITC=UDI or RDI, FNUR=64 or 56 kbit/s and CE=NT or "both" is signalled in the SETUP message. The MS shall signal FTM as specified in B.1.2.3.
- 2) This negotiation is possible, only if ITC=UDI, FNUR=32 kbit/s and CE= "both" is signalled in the SETUP message. The UE shall signal PIAFS as specified in B.1.2.4.
- 3) This negotiation is possible, only if ITC=UDI or RDI, FNUR=32 ,or 56 kbit/s and CE=T or "both" is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.1.3, B.1.3.1.4 and B.1.3.1.6.
- ~~5)~~ ~~5)~~ This negotiation is possible, ~~only~~ if ITC=3,1 kHz, FNUR=28.8 kbit/s, MT=V.34 and CE=T or "both" is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.2.3.
- 6) This negotiation is possible, if ITC=UDI or RDI, FNUR=64 or 56 kbit/s and CE=T is signalled in the SETUP message. The MS shall signal 3G-H.324/M as specified in B.1.3.1.3, B.1.3.1.4, and B.1.3.1.5

*****End of Modified Section *****

CR-Form-v4	
CHANGE REQUEST	
⌘ 27.001 CR 063 ⌘ ev 1 ⌘	Current version: 4.4.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of erroneous information in B.1.3.1.6.		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ B.1.3.1.6 (32k multimedia) 27.001 is not compliant with 22.002 and 29.007. TS 22.002 and TS 29.007 recognize UDI but not RDI for the 32k multimedia. IR attribute value "not-used" not defined in TS 24.008.
Summary of change:	⌘ Removed ITC value RDI in B.1.3.1.6. Removed attribute value "not-used" for IR as this value is not defined in TS 24.008.
Consequences if not approved:	⌘ Confusing information remains in the specification.

Clauses affected:	⌘ B.1.3.1.6
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘ New flowdiagram higlihted in GREEN colour. Deleted flowdiagram is highlighted in BLUE colour.

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

B.1.3.1.6 3G-H.324/M, FNUR=32.0 kbit/s (TCH/F32.0, UTRAN)

ITC	Oct.	UDI	3.1 kHz	FAX3	Speech	RDI						
SAP	5	NA	I.440	Layer/protocol related								
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No				
SA	6		A			S						
CE	6c	NA	NT	bothNT	bothT	T						
S	4	NA	SDU	unstructured								
U1L2P	7		ISO6429	COPnoFlct	NAV							
DC	4	NA		DC	NO							
NDB	6a	NA	7	8								
NPB	6b	NA	odd	even	0	1	none					
NSB	6a	NA	1	2								
Radio channel related												
RCR	3	dualHR		dualFR	FR							
UR ³⁾	6a	NA	0.3	1.2	2.4	4.8	9.6					
IR ³⁾	6b	NA	8	16	not-used							
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1	NAV			
OMT	6d	no other MT		V.34	NAV							
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV
ACC ^{1,2)}	6e	none	4.8	9.6	14.4	NAV ²⁾						
MaxNumTCH ²⁾	6e	NA	1	2	3	4	5	6	7	8	NAV ²⁾	
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6	NAV		
UIMI ²⁾	6f	NA	not req.	upto 1	upto 2	upto 3	upto 4	NAV ²⁾				
ACC ext. ^{1,2)}	6g	not accept.	28.8	32.0	43.2	NAV ²⁾						
ASYM ²⁾	6g	no. pref.	u1 biased	d1 biased	NAV ²⁾							

ITC	Oct.	UDI	3.1 kHz	FAX3	Speech	RDI						
SAP	5	NA	Layer/protocol related		I.440							
RA	5/5a	NA	PIAFS	V.120	V.110	H.223 & H.245	X.31 Flag	No				
SA	6		A		S							
CE	6c	NA	NT	bothNT	bothT	T						
S	4	NA	SDU			unstructured						
U1L2P	7		ISO6429		COPnoFlct	NAV						
DC	4	NA		DC		NO						
NDB	6a	NA		7		8						
NPB	6b	NA	odd	even	0	1	none					
NSB	6a	NA		1		2						
Radio channel related												
RCR	3	dualHR		dualFR		FR						
UR ³⁾	6a	NA	0.3	1.2	2.4	4.8	9.6					
IR ³⁾	6b	NA	8			16						
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto 1	NAV			
OMT	6d	no other MT				V.34			NAV			
FNUR	6d	9.6	14.4	19.2	28.8	32	33.6	38.4	48	56	64	NAV
ACC ^{1,2)}	6e	none		4.8			9.6		14.4			NAV ²⁾
MaxNumTCH ²⁾	6e	NA	1	2	3	4	5	6	7	8		NAV ²⁾
WAIUR	6f	NA	9.6	14.4	19.2	28.8	38.4	43.2	57.6			NAV
UIMI ²⁾	6f	NA	not. req.	upto 1	upto 2		upto 3		upto 4			NAV ²⁾
ACC ext. ^{1,2)}	6g	not accept.				28.8	32.0		43.2			NAV ²⁾
ASYM ²⁾	6g	no. pref.				u1 biased		d1 biased				NAV ²⁾

CR-Form-v4

CHANGE REQUEST

⌘ **27.001** **CR** **067** ⌘ ev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of erroneous information in B.1.3.1.6.		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ Correction (CS Bearers)	Date:	⌘ 2001-07-09
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		

Reason for change:	⌘ B.1.3.1.6 (32k multimedia) 27.001 is not compliant with 22.002 and 29.007. TS 22.002 and TS 29.007 recognize UDI but not RDI for the 32k multimedia.		
Summary of change:	⌘ Removed ITC value RDI in B.1.3.1.6. Removed attribute value "not-used" for IR as this value is not defined in TS 24.008.		
Consequences if not approved:	⌘ Confusing information remains in the specification.		

Clauses affected:	⌘ B.1.3.1.6		
Other specs affected:	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	
Other comments:	⌘ New flowdiagram framed with GREEN colour . Deleted flowdiagram is framed with BLUE colour .		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

B.1.3.1.6 3G-H.324/M, FNUR=32.0 kbit/s (TCH/F32.0, UTRAN)

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI				
		Layer/protocol related								
SAP	5	NA	I.440	BothNT	X.32					
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No		
SA	6	A		S						
CE	6c	NT	bothNT	bothT	T			NA		
S	4	NA	SDU	unstructured						
U1L2P	7	X.25	ISO6429	COPnoFlct	NAV					
DC	4	NA	DC	NO						
NDB	6a	NA	7	8						
NPB	6b	NA	odd	even	0	1		none		
NSB	6a	NA	1	2						
		Radio channel related								
RCR	3	dualHR	dualFR	FR						
IR ³⁾	6b	8	16					NA		
UR ³⁾	6a	0.3	1.2	2.4	4.8	9.6		NA		
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto1	NA	
OMT	6d	no other MT	V.34							
FNUR	6d	9.6	14.4	19.2	28.8	32.0	38.4	48	56	64
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV	
ACC ¹⁾	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ²⁾	
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4	NA	NAV ²⁾		
MaxNumTCH	6e	1	2	3	4	5	6	7	8	NAV ²⁾
ASYM	6g	no. pref.	u1 biased	d1 pref.	NAV ²⁾					

ITC	Oct. 3/5a	UDI	3.1 kHz	FAX3	Speech	RDI			
		Layer/protocol related							
SAP	5	NA		I.440	BothNT	X.32			
RA	5	NA	PIAFS	V.110	V.120	H.223 & H.245	X.31 Flag	No	
SA	6	A			S				
CE	6c	NT	bothNT		bothT		T	NA	
S	4	NA		SDU		unstructured			
U1L2P	7	X.25		ISO6429		COPnoFlct		NAV	
DC	4	NA			DC		NO		
NDB	6a	NA		7		8			
NPB	6b	NA	odd	even	0	1		none	
NSB	6a	NA		1		2			
		Radio channel related							
RCR	3	dualHR			dualFR		FR		
IR ³⁾	6b	8			16		not-used	NA	
UR ³⁾	6a	0.3	1.2	2.4	4.8	9.6		NA	
MT	6c	none	V.21	V.22	V.22bis	V.26ter	V.32	auto1	NA
OMT	6d	no other MT				V.34			
FNUR	6d	9.6	14.4	19.2	28.8	32.0	38.4	48	56
WAIUR	6f	9.6	14.4	19.2	28.8	43.2	57.6	NA	NAV
ACC ¹⁾	6e/g	4.8	9.6	14.4	28.8	32.0	43.2	none	NAV ²⁾
UIMI	6f	not. Req.	upto 1	upto 2	upto 3	upto 4		NA	NAV ²⁾
MaxNumTCH	6e	1	2	3	4	5	6	7	8
ASYM	6g	no. pref.		u1 biased		d1 pref.		NAV ²⁾	