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Technical Report

3rd Generation Partnership Proj
Technical Specification Group Radio Access Netw
Typical examples of RABs and RBs supported by UT
(Releas

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Foreword

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- x the first digit:
  - 1 presented to TSG for information;
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1 Scope

The present document provides a list of examples of RABs and RAB combinations which are supported by UTRA with examples of radio interface mapping for these RABs onto Radio Bearers and Signalling Radio Bearers.

This list of examples describes typical parameters, and should only be understood as possible configurations i.e. any other configuration supported by the Core Specifications and consistent with a given UE capability shall also be supported by this UE.

The present document addresses the FDD mode as well as the TDD mode.

This report is a release independent report. This means that the latest release applicable to 3GPP is the reference that this TR is defined upon, and contains information on all previous releases. Actual release where a given example applies is indicated in the relevant section.

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. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 34.108: "Common Test Environments for User Equipment (UE) Conformance Testing

[2] 3GPP TS 23.107: “Quality of Service (QoS) concept and architecture”

3 QoS Architecture and RAB attributes

From a user point-of-view services are considered end-to-end, this means from a Terminal Equipment (TE) to another TE. An End-to-End Service may have a certain Quality of Service (QoS) which is provided for the user through the different networks. In UMTS, it is the UMTS Bearer Service that provides the requested QoS through the use of different QoS classes as defined in ~~TS 23.107~~[2].

The UMTS Bearer Service consists of two parts, the Radio Access Bearer (RAB) Service~~, RAB,~~ and the Core Network Bearer Service. The Radio Access Bearer Service is realised by a Radio Bearer (RB) Service and an Iu-Bearer Service. The relationship between the services is illustrated in figure ~~6.10.1~~3.1.

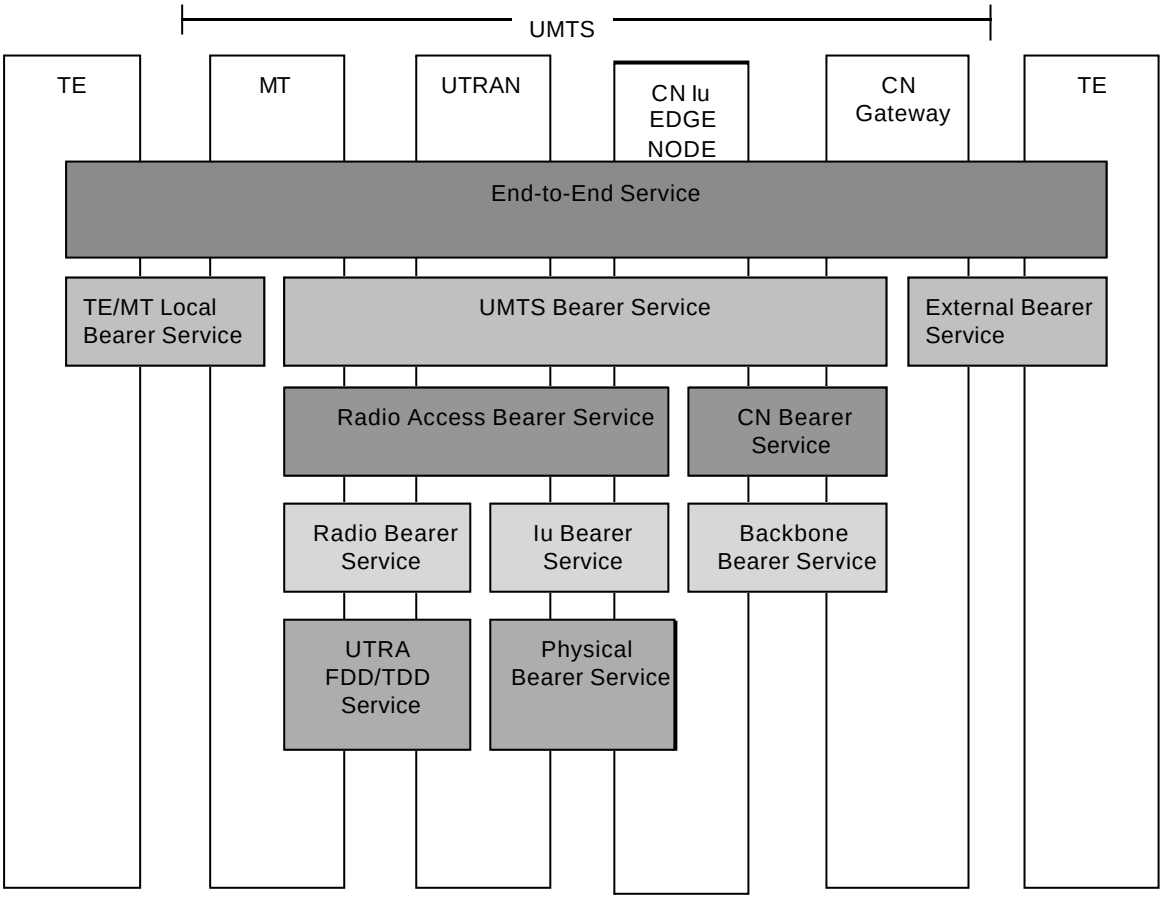

Figure ~~6.10.13~~.1: UMTS QoS Architecture

The Radio Access Bearer Service is characterised by a number of attributes such as Traffic class, Maximum bit rate, Guaranteed bit rate, SDU error ratio, Residual BER, Transfer Delay etc. As a first approach the four following attributes have been considered to come up with the parameter settings in clause 6~~.10.2.4~~ for FDD mode and 7~~6.10.3.4~~ for TDD mode:

- Traffic class;
- SSD;
- Maximum bit rate;
- Residual BER.

The Traffic classes are explained in table 3.1~~6.10.1.1~~. The Maximum bit rate has been considered at RLC layer and Physical Layer for the acknowledged and unacknowledged modes respectively. The Residual BER is understood as BER at RLC layer and Transport BLER for the acknowledged and unacknowledged modes respectively.

Table ~~6.10.13~~.1: Traffic classes

Traffic class	**Conversational class** conversational RT	**Streaming class** streaming RT	**Interactive class** Interactive best effort	**Background** Background best effort
Fundamental characteristics	- Preserve time relation (variation) between information entities of the stream Conversational pattern (stringent and low delay)	- Preserve time relation (variation) between information entities of the stream (i.e. some but constant delay)	Request response pattern Preserve payload content	Destination is not expecting the data within a certain time Preserve payload content
Example of the application	- speech, video, …	- facsimile (NT) - streaming audio and video	- Web browsing	- background download of emails

4 List of RABs and SRBs

The following table provides examples of Radio Access Bearers (RABs) which can be realized by Radio Bearers (RBs) as defined in chapter 6 and 7 ~~and s~~Signalling (SRBs) ~~which will be considered in the following clauses~~. The data rate given for each RAB is the maximum data rate that can be supported by that RAB.

Table ~~XX~~4.1: Examples of Radio Access Bearers (RABs).

#	Traffic class [~~215~~]	SSD [~~215~~]	Max. rate, kbps	CS/PS
1	Conversational	Speech	UL:12.2 DL:12.2	CS
2	Conversational	Speech	UL:10.2 DL:10.2	CS
3	Conversational	Speech	UL:7.95 DL:7.95	CS
4	Conversational	Speech	UL:7.4 DL:7.4	CS
5	Conversational	Speech	UL:6.7 DL:6.7	CS
6	Conversational	Speech	UL:5.9 DL:5.9	CS
7	Conversational	Speech	UL:5.15 DL:5.15	CS
8	Conversational	Speech	UL:4.75 DL:4.75	CS
9	Conversational	Unknown	UL:28.8 DL:28.8	CS
10	Conversational	Unknown	UL:64 DL:64	CS
11	Conversational	Unknown	UL:32 DL:32	CS
12	Streaming	Unknown	UL:14.4 DL:14.4	CS
13	Streaming	Unknown	UL:28.8 DL:28.8	CS
14	Streaming	Unknown	UL:57.6 DL:57.6	CS
15	Streaming	Unknown	UL:0 DL:64	CS
15a	Streaming	Unknown	UL:16 DL:64	PS
16	Streaming	Unknown	UL:64 DL:0	CS
17	Void			
17a	Streaming	Unknown	UL:16 DL:128	PS
18	Void			
19	Void			
20	Interactive or Background	N/A	UL:32 DL:8	PS
20a	Interactive or Background	N/A	UL:8 DL:8	PS
20b	Interactive or Background	N/A	UL:16 DL:16	PS
20c	Interactive or Background	N/A	UL:32 DL:32	PS
21	Interactive or Background	N/A	UL:64 DL:8	PS
22	Interactive or Background	N/A	UL:32 DL:64	PS
23	Interactive or Background	N/A	UL:64 DL:64	PS
24	Interactive or Background	N/A	UL:64 DL:128	PS
25	Interactive or Background	N/A	UL:128 DL:128	PS
26	Interactive or Background	N/A	UL:64 DL:384	PS
27	Interactive or Background	N/A	UL:128 DL:384	PS
28	Interactive or Background	N/A	UL:384 DL:384	PS
29	Interactive or Background	N/A	UL:64 DL:2048	PS
30	Interactive or Background	N/A	UL:128 DL:2048	PS
31	Interactive or Background	N/A	UL:384 DL:2048	PS
32	Interactive or Background	N/A	UL:64 DL:256	PS
33	Interactive or Background	N/A	UL:0 DL:32	PS
34	Interactive or Background	N/A	UL:32 DL: 0	PS
35	Interactive or Background	N/A	UL:64 DL:144	PS
36	Interactive or Background	N/A	UL:144 DL:144	PS

The following table provides examples of Signalling Radio Bearers (SRBs) which can use configurations as defined in chapter 6 and 7.

Table ~~6.10.2.1.2xx~~4.2: Signalling Radio Bearers (SRBs)

#	Maximum rate, kbps	Logical channel	PhyCh onto which SRBs are mapped
1	UL:1.7 DL:1.7	DCCH	DPCH
2	UL:3.4 DL:3.4	DCCH	DPCH
3	UL:13.6 DL:13.6	DCCH	DPCH
4	DL:27.2 (alt. 40.8)	DCCH	SCCPCH
5	UL:16.6	CCCH	PRACH
6	DL:30.4 (alt. 45.6)	CCCH	SCCPCH
7	DL:33.2 (alt. 49.8)	BCCH:	SCCPCH
8	DL:24 (alt. 6.4)	PCCH	SCCPCH
9	UL:16.8 (TDD)	SHCCH	PRACH
10	UL:16.8 (TDD)	SHCCH	PRACH or PUSCH
11	DL:16 (TDD)	SHCCH	SCCPCH
12	DL:16 (TDD)	SHCCH	SCCPCH or PUSCH

5 Combinations of RABs

The present document contains examples of Radio configuration for following combinations of RABs.

NOTE: It is understood that for speech service the AMR mode may be operated asymmetrically for the uplink and downlink.

List of RAB combinations:

Combinations on DPCH

1) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH.

2) Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH.

3) Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH.

4) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~5~~4a) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~6~~5) Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~7~~5a) Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

6~~8~~) Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~9~~7) Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~10~~7a) Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~11~~8) Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

1~~2~~9) Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

103) Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

114) Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

125) Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

136) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

147) Conversational / unknown / UL:32 DL:32 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

158) Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

169) Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

2017) Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

2118) Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

2219) Streaming / unknown / UL:64 DL:0 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

20) Void

21) Void

22) Void

23) Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

2423a) Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

2523b) Interactive or background / UL:16 DL:16 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

2623c) Interactive or background / UL:32 DL:32 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

2723d) Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI)
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

248) Interactive or background / UL:64 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

259) Interactive or background / UL:32 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

3026) Interactive or background / UL:64 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

3127) Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

3228) Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~33~~29) Interactive or background / UL:64 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

304) Interactive or background / UL:144 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

31~~5~~) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

32~~6~~) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

33~~7~~) Interactive or background / UL:128 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

34~~8~~) Interactive or background / UL:384 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

35~~9~~) Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~40~~36) Interactive or background / UL:128 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~41~~37) Interactive or background / UL:384 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~42~~38) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~43~~38a) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:0 DL:0 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (FDD)

~~44~~38b) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (FDD)

~~45~~38c) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:32 DL:32 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (FDD)

~~46~~38d) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (FDD)

~~47~~38e) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:0 DL:0 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~48~~38f) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~49~~38g) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:16 DL:16 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~50~~38h) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:32 DL:32 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~51~~38i) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~52~~38j) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

~~5~~39) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:32 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~5~~40) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

~~55~~41) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~56~~42) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~57~~43) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

~~58~~44) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

4~~5~~9) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:128 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

4~~6~~0) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

47~~61~~) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

48) Void

49~~62~~) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

49a~~63~~) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

50~~64~~) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

51~~65~~) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

51a~~66~~) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or Background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

51b67)Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or Background / UL:16 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

5268) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

5369) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

5470) Interactive or /background / UL:64 kbps DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

55) Void

5671) Interactive or background / UL:8 DL:8 kbps / PS RAB
+ Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

5772) Interactive or background / UL:64 DL:64 kbps / PS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

5873) Streaming / unknown / UL:16 DL:64 kbps / PS RAB
+ Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH. (FDD)

Combinations on SCCPCH

1) Stand-alone 24 kbps SRB for PCCH.

2) Interactive or background / DL:32 kbps / PS RAB
+ SRB for CCCH
+ SRBs for DCCH
+ SRB for BCCH.

3) Interactive or background / DL:32 kbps / PS RAB
+ SRB for PCCH
+ SRB for CCCH
+ SRBs for DCCH
+ SRB for BCCH.

4) RB for CTCH (FDD)
+ SRB for CCCH
+SRB for BCCH

Combinations on PRACH

1) 1) Interactive or background / UL:32 kbps / PS RAB
+ SRB for CCCH
+ SRBs for DCCH.

Combinations on PDSCH, SCCPCH, PUSCH and PRACH (TDD)

1) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:16.8 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL:16.8 DL:16 kbps for SHCCH.

2) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:16.8 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL:16.8 DL:16 kbps for SHCCH.

3) Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:3.4 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL:16.8 DL:16 kbps for SHCCH.

Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH (TDD)

1) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

2) Conversationnal / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

3) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

6 Examples of Radio Bearers and Signalling Radio Bearers for FDD

Note to the editior: Level of the headings should be changed.

6.1 Combinations on DPCH

6.1.1 Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH

See clause 6.10.2.4.1.2 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32kbps with support of DL SF = 512.

This is supported in release 99.

6.1.2 Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.3 Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH

See clause 6.10.2.4.1.3 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.4 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.4 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.4a~~5~~ Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.4a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.5~~6~~ Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.5 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.5a~~7~~ Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.5a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.6~~8~~ Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.6 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.7~~9~~ Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.7 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.~~10~~7a Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.7a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.~~11~~8 Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.8 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.~~12~~9 Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.9 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.10~~3~~ Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

See clause 6.10.2.4.1.10 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.114 Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

See clause 6.10.2.4.1.11 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.125 Conversational / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.12 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.136 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.13 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.147 Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.14 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.158 Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.15 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps with support of Turbo coding.

This is supported in release 99.

6.1.169 Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.16 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.1720 Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.17 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.18~~21~~ Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.18 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 64 kbps plus support for 'Maximum total number of transport blocks received within TTIs that end at the same time' = 16.

This is supported in release 99.

6.1.19~~22~~ Streaming / unknown / UL:64 DL:0 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.19 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 32 kbps plus support for 'Maximum total number of transport blocks transmitted within TTIs that start at the same time' = 16.

This is supported in release 99.

6.1.20 Void

6.1.21 Void

6.1.22 Void

6.1.23 Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.23 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 32 kbps with support of Turbo Coding. For the alternative combination, the minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.2~~3a4~~ Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.23a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 32 kbps, DL: 32 kbps.

This is supported in release 99.

6.1.2~~3b5~~ Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.23b of [1]~~TS34.108.~~

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.2~~3c6~~ Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.23c of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.23d~~7~~ Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI)+ UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.23d of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.24~~8~~ Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.24 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 32kbps plus support for turbo coding.

This is supported in release 99.

6.1.25~~9~~ Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.25 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps. The minimum UE class to support the alternative UL configuration (10ms TTI) is UL: 32kbps.

This is supported in release 99.

6.1.26~~30~~ Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.26 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.27~~31~~ Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.27 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.28~~32~~ Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.28 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 128kbps plus support for 'Maximum total number of transport blocks transmitted within TTIs that start at the same time' = 16, DL: 128kbps.

This is supported in release 99.

6.1.29~~33~~ Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.29 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.304 Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.30 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 128kbps plus support for 'Maximum total number of transport blocks transmitted within TTIs that start at the same time' = 16, DL: 128kbps.

This is supported in release 99.

6.1.315 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.1.315.1 On DPCH

See clause 6.10.2.4.1.31 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps plus support for 'Maximum number of physical channel bits received in any 10ms interval' = 9600. The minimum UE class to support the alternative DL configuration (20ms TTI) is DL: 384kbps.

This is supported in release 99.

6.1.315.2 On PDSCH and DPCH

See clause 6.10.2.4.2.1 of [1]TS34.108.

6.1.326 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.1.325.1 On DPCH

See clause 6.10.2.4.1.32 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 384kbps plus support for PDSCH.

This is supported in release 99.

6.1.325.2 On PDSCH and DPCH

See clause 6.10.2.4.2.2 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 384kbps plus support for PDSCH. The minimum UE class to support the alternative DL configuration (20ms TTI) is DL: 768kbps;

This is supported in release 99.

6.1.337 Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.33 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 128kbps plus support for 'Maximum total number of transport blocks transmitted within TTIs that start at the same time' = 16, DL: 384kbps. The minimum UE class to support the alternative DL configuration (20ms TTI) is DL: 768kbps.

This is supported in release 99.

6.1.348 Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.34 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 384kbps, DL: 384kbps. The minimum UE class to support the alternative DL configuration (20ms TTI) is DL: 768kbps.

This is supported in release 99.

6.1.359 Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.1.35.1 On DPCH

See clause 6.10.2.4.1.35 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 2048kbps plus support for 'Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant' = 40960 and 'Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant' = 40960.

This is supported in release 99.

6.1.35.2 On PDSCH and DPCH

See clause 6.10.2.4.2.3 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 2048kbps plus support for 'Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant' = 40960 and 'Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant' = 40960.

This is supported in release 99.

6.1.3640 Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.36 of [1]TS34.108.

The minimum UE classes supporting this combination are UL: 128 kbps plus support for 'Maximum total number of transport blocks transmitted within TTIs that start at the same time' = 16, DL: 2048 kbps.

This is supported in release 99.

6.1.3741 Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.37 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 384 kbps, DL: 2048 kbps.

This is supported in release 99.

6.1.3842 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 64 kbps 32 kbps plus support of TC.

This is supported in release 99.

6.1.~~4~~38a Conversational / speech / UL: 12.2 DL: 12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 32~~64~~kbps.

This is supported in release 99.

6.1.~~44~~38b Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38b of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: ~~64kbps~~ 32 kbps plus support of TC.

This is supported in release 99.

6.1.~~45~~38c Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38c of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.~~46~~38d Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38d of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.~~47~~38e Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38e of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 32~~64~~kbps.

This is supported in release 99.

6.1.~~48~~38f Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38f of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: ~~64kbps~~ 32 kbps plus support of TC.

This is supported in release 99.

6.1.~~49~~38g Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38g of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.~~50~~38h Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38h of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.~~51~~38i Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38i of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.~~52~~38j Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.38j of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbp, DL: 128kbps.

This is supported in release 99.

6.1.~~53~~39 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.39 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.~~54~~0 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.40 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 64 kbps.

This is supported in release 99.

6.1.~~55~~41 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.41 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 128 kbps.

This is supported in release 99.

6.1.~~56~~42 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.1.42~~35~~.1 On DPCH

See clause 6.10.2.4.1.42 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 384 kbps.

This is supported in release 99.

6.1.4235.2 On PDSCH and DPCH

See clause 6.10.2.4.2.4 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 384 kbps., support of PDSCH.

This is supported in release 99.

6.1.5743 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.1.435.1 On DPCH

See clause 6.10.2.4.1.43 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 384 kbps with TTI=10ms and UL: 64 kbps, DL: 768 kbps with TTI=20ms.

This is supported in release 99.

6.1.435.2 On PDSCH and DPCH

See clause 6.10.2.4.2.5 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64 kbps, DL: 384 kbps with TTI=10ms and UL 64 kbps, DL: 768 kbps with TTI=20ms, support of PDSCH.

This is supported in release 99.

~~6.1.58 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH~~

~~See clause 6.10.2.4.2.6 of TS34.108.~~

6.1.5944 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.44 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL384 kbps, DL: 2048 kbps.

This is supported in release 99.

6.1.6045 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.45 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.6146 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.46 of [1]TS34.108.

The minimum UE classes supporting this combination are, UL: 64kbps, DL 128kbps.

This is supported in release 99.

6.1.47 Void

6.1.48 Void

6.1.~~62~~49 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.49 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.~~63~~49a Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.49a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.~~64~~50 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.50 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 128kbps, DL: 128kbps. The minimum UE classes to support the alternative combination (40m TTI) is, UL: 384kbps.

This is supported in release 99.

6.1.~~65~~51 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.51 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 128kbps, DL: 128kbps. The minimum UE classes to support the alternative combination (40m TTI) is, UL: 384kbps.

This is supported in release 99.

6.1.~~66~~51a Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.51a of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.~~67~~51b Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or Background / UL:16 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.51b of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 128kbps.

This is supported in release 99.

6.1.~~68~~52 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.52 of [1]~~TS34.108~~.

The minimu m UE classes supporting this combination are, UL: 128kbps, DL: 384kbps. The minimum UE classes to support the alternative combination (40m TTI) is, UL: 384kbps.

This is supported in release 99.

6.1.~~69~~53 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.53 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 384kbps, DL: 384kbps.

This is supported in release 99.

6.1.~~70~~54 Interactive or background / UL:64 DL:128 kbps / PS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.54 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 384kbps.

This is supported in release 99.

6.1.55 Void

6.1.~~71~~56 Interactive or background / UL:8 DL:8 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.56 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps plus support for turbo coding.

This is supported in release 99.

6.1.~~72~~57 Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.57 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

6.1.~~73~~58 Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.58 of [1]~~TS34.108~~.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps. This is supported in release 99.

6.2 Combinations on S-CCPCH

6.2.1 Stand-alone signalling RB for PCCH

See clause 6.10.2.4.3.1 of [1]~~TS34.108~~.

The minimum UE class supporting this combination is DL: 32 kbps.

This is supported in release 99.

6.2.2 Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

See clause 6.10.2.4.3.2 of [1]~~TS34.108~~.

The minimum UE class supporting this combination is DL: 64 kbps.

This is supported in release 99.

6.2.3 Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

See clause 6.10.2.4.3.2a of [1]~~TS34.108~~.

The minimum UE class supporting this combination is DL: 64 kbps.

This is supported in release 99.

6.2.4 Interactive/Background 32 kbps RAB + SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

See clause 6.10.2.4.3.3 of TS34.108.

The minimum UE class supporting this combination is DL: 64 kbps.

This is supported in release 99.

6.2.5 RB for CTCH + SRB for CCCH + SRB for BCCH

See clause 6.10.2.4.3.4 of [1]~~TS34.108~~.

The minimum UE class supporting this combination is DL: 32 kbps.

This is supported in release 99.

6.3 Combinations on PRACH

6.3.1 Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH

See clause 6.10.2.4.4.1 of [1]~~TS34.108~~.

The minimum UE class supporting this combination is UL: 32 kbps.

This is supported in release 99.

6.3.2 Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH

See clause 6.10.2.4.4.2 of [1]~~TS34.108~~.

The minimum UE class supporting this combination is UL: 32 kbps.

This is supported in release 99.

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Note to the editior: Level of the headings should be changed.

6.17.1 Combinations on DPCH

7.1.1 Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.2 Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.2 of TS 34.108[1]~~ See clause 6.10.3.4.1.2 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.2 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.3 Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.3 of TS 34.108[1]~~ See clause 6.10.3.4.1.3 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.3 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.4 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.4 of TS 34.108[1]~~ See clause 6.10.3.4.1.4 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.4 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.5 Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.5 of TS 34.108[1]~~ See clause 6.10.3.4.1.5 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.5 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.6 Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.6 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.6 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.6 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.7 Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.7 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.7 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.7 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.8 Conversational / speech / UL:6.7 DL: 6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.8 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.8 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.8 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.9 Conversational / speech / UL:5.9 DL:5.9 kbps / CS rab + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.9 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.9 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.9 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.10 Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.10 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.10 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.10 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.11 Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.11 of TS 34.108~~[1] ~~[1]~~ See clause 6.10.3.4.1.11 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.11 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps, DL: 32kbps.

This is supported in release 99.

7.1.12 Conversational / unknown / UL:28.8 DL:28.8kbps / CS RAB + UL:3.4 DL:3.4kbps SRBs for DCCH

~~See clause 6.10.3.4.1.12 of TS 34.108[1].~~ See clause 6.10.3.4.1.12 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.12 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps plus support for turbo coding, maximum TB bits 2560 and TB TC bits 1280, DL: 32kbps plus support for turbo coding, maximum TB bits 2560 and TB TC bits 1280.

This is supported in release 99.

7.1.13 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.13 of TS 34.108[1].~~ See clause 6.10.3.4.1.13 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.13 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 32kbps plus support for turbo coding, maximum TB bits 2560 (Alt. 3840) and TB TC bits 1280 (Alt. 2560).

This is supported in release 99.

7.1.14 Conversational / unknown / UL:32 DL: 32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.14 of TS 34.108[1].~~ See clause 6.10.3.4.1.14 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.14 of [1] for 1.28Mcps TDD.

For 3.84Mcps TDD the minimum UE classes supporting this combination are, UL: 32kbps plus support for minimum SF 4, turbo coding, maximum TB bits 1280 (Alt. 2560) and TB TC bits 640 (Alt. 1280), DL: 32kbps plus support for turbo coding, maximum TB bits 1280(Alt. 2560) and TB TC bits 640 (Alt. 1280).

This is supported in release 99.

For 1.28Mcps TDD the minimum UE classes supporting this combination are, UL: 32kbps plus support for turbo coding, maximum TB bits 1280 (Alt. 2560) and TB TC bits 640 (Alt. 1280), DL: 32kbps plus support for turbo coding and maximum TB bits 1280(Alt. 2560) and TB TC bits 640 (Alt. 1280).

This is supported in release 99.

7.1.15 Streaming / unknown / UL:14.4 DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.15 of TS 34.108[1].~~ See clause 6.10.3.4.1.15 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.15 of [1] for 1.28Mcps TDD.

The minimumUE classes supporting this combination are, UL: 32kbps plus support for turbo coding, maximum TB bits 1280 and TB TC bits 640, DL: 32kbps plus support for turbo coding, maximum TB bits 1280 and TB TC bits 640.

This is supported in release 99.

7.1.16 Streaming / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

~~See clause 6.10.3.4.1.16 of TS 34.108[1].~~ See clause 6.10.3.4.1.16 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.1.16 of [1] for 1.28Mcps TDD.

The minimum UE classes supporting this combination are, UL: 32kbps plus support for turbo coding, maximum TB bits 2560 and TB TC bits 1280, DL: 32kbps plus support for turbo coding, maximum TB bits 2560 and TB TC bits 1280.

This is supported in release 99.

7.1.17 Streaming / unknown / UL: 57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.17 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps.

This is supported in release 99.

7.1.18 Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.18 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 32kbps support for turbo codes not required, DL: 128kbps.

This is supported in release 99.

7.1.19 Streaming / unknown / UL:64 DL:0 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.19 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 32kbps support for turbo codes not required.

This is supported in release 99.

7.1.2~~0~~ Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.23 of [1]~~TS 35.108~~

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 32kbps plus support for turbo coding.

This is supported in release 99.

7.1.2~~4~~1 Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.24 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 32kbps plus support for turbo coding.

This is supported in release 99.

7.1.2~~5~~2 Interactive or background / UL:32 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.25 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps, DL: 64kbps. This is supported in release 99.

7.1.2~~6~~3 Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.26 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 64kbps.

This is supported in release 99.

7.1.274 Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.27 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 128kbps.

This is supported in release 99.

7.1.285 Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.28 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 128kbps plus support for transmission of 16 transport blocks in a TTI, DL: 128kbps.

This is supported in release 99.

7.1.296 Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.29 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 128kbps.

This is supported in release 99.

7.1.3027 Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.30 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 128kbps.

This is supported in release 99.

7.1.3128 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.31 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 384kbps.

This is supported in release 99.

7.1.3229 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.32 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 384kbps. This is supported in release 99.

7.1.330 Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.33 of TS 34.108[1]

The minimum UE classes supporting this combination are, UL: 128kbps plus support for transmission of 16 transport blocks in a TTI, DL: 384kbps.

This is supported in release 99.

7.1.341 Interactive or background / UL:384 DL:384 kbps / PS RAB +UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.34 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 768kbps, DL: 384kbps.

This is supported in release 99.

7.1.352 Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.35 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for transmission of 16 transport blocks in a TTI, and 2 physical channels per TS, DL: 2048kbps plus support for maximum TB bits 40960 and maximum TB TC bits 40960 .

This is supported in release 99.

7.1.363 Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.36 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 128kbps plus support for transmission of 16 transport blocks in a TTI, DL: 2048kbps plus support for maximum TB bits 40960 and maximum TB TC bits 40960. This is supported in release 99.

7.1.374 Interactive or background / UL :384 DL:2048 kbps / PS RAB+UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.37 of ~~TS 34.108~~[1].

The minimum UE classes supporting this combination are UL: 768 kbps plus support for turbo coding, DL: 2048 kbps plus support for turbo coding.

This is supported by release 99.

7.1.385 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.38 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support for turbo coding, DL:64 kbps plus support for Turbo coding .

This is supported by release 99.

7.1.396 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.39 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL:64 kbps plus support for turbo coding, DL:64 kbps plus support for turbo coding.

This is supported by release 99.

7.1.4037 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.40 of TS 34.108[1]

The minimum UE classes supporting this combination are UL:64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL:64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD).

This is supported by release 99.

7.1.4138 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.41 of TS 34.108[1]

The minimum UE classes supporting this combination are UL:64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 128 kbps plus support for turbo coding.

This is supported by release 99.

7.1.4239 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.42 of TS 34.108[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 384 kbps plus support for turbo coding.

This is supported by release 99.

7.1.4340 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.43 of TS 34.108[1]

The minimum UE classes supporting this combination are UL:64 kbps plus support of turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 768 kbps plus support of turbo coding.

This is supported by release 99.

7.1.4441 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.44 of TS 34.108[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support for turbo coding (plus support of SF1 and 8PSK for 1.28 Mcps TDD), DL:2048 kbps plus support for turbo coding .

This is supported by release 99.

7.1.4542 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.45 of TS 34.108[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support of turbo coding , DL:64 kbps plus support of turbo coding.

This is supported by release 99.

7.1.4643 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.46 of TS 34.108[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support for turbo coding, DL: 64 kbps plus support for turbo coding.

This is supported by release 99.

7.1.494 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.49 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL:64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 64 kbps plus support for turbo coding.

This is supported by release 99.

7.1.5045 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.50 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL: 64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 128 kbps plus support for turbo coding.

This is supported by release 99

7.1.5146 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.51 of ~~TS 34.108~~[1]

The minimum UE classes for this combinations are UL: 64 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 128 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD).

This is supported by release 99.

7.1.5247 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.52 of ~~TS 34.108~~[1]

The minimum UE classes for this combination are UL: 64 kbps plus support of turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 384 kbps plus support of turbo coding.

This is supported by release 99.

7.1.5348 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.53 of ~~TS 34.108~~[1]

The minimum UE classes for this combination are UL: 128 kbps plus support for turbo coding (plus support of SF1 for 1.28 Mcps TDD), DL: 384 kbps plus support for turbo coding.

This is supported by release 99.

7.1.5449 Interactive or background / UL:64 DL:128 kbps / PS RAB + streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB + UL:3.4 DL:3.4kbps SRBs for DCCH

See clause 6.10.3.4.1.54 of ~~TS 34.108~~[1]

The minimum UE classes for this combination are UL: 64 kbps plus support for turbo coding, DL: 128 kbps plus support for turbo coding.

This is supported by release 99.

7.2 Combinations on PDSCH, SCCH, PUSCH and PRACH

7.2.1 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:16.8 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH + UL:16.8 DL:16 kbps SRBs for SHCCH

See clause 6.10.3.4.2.1 of ~~TS 34.108~~[1]

See clause 6.10.3.4.2.1 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.2.1 of [1] for 1.28Mcps TDD.

For 3.84Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbps (See Note), DL: 128kbps plus support for 21 physical channels per frame, maximum TB bits (Alt. 7680), TB CC bits 1280, TB TC bits (Alt. 6400) and (Alt. TTI TB 32).

This is supported in release 99.

For 1.28Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbs plus support for SF 1, DL: 384kbs plus support for (Alt. 8PSK), maximum TB bits (Alt. 7680), TB CC bits 1280, TB TC bits (Alt. 6400) and (Alt. TTI TB 32).

This is supported in release 99.

7.2.2 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:16.8 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH + UL:16.8 DL:16 kbps SRBs for SHCCH

See clause 6.10.3.4.2.2 of ~~TS 34.108~~[1]

For 3.84Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbps (See Note), DL: 384kbps plus support for 29 physical channels per frame, maximum TB bits (Alt. 10240), TB CC bits 1280, and TB TC bits (Alt. 8960).

This is supported in release 99.

For 1.28Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbs plus support for SF 1, DL: 384kbs (with SF 1 option) plus support for maximum TB bits (Alt. 10240), TB CC bits 1280, and TB TC bits (Alt. 8960).

This is supported in release 99.

7.2.3 Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:16.8 DL:33.6 kbps SRBs for DCCH, CCCH and BCCH + UL:16.8 DL:16 kbps SRBs for SHCCH

~~See clause 6.10.3.4.2.3 of TS 34.108[1]~~

See clause 6.10.3.4.2.3 of [1] for 3.84Mcps TDD, and clause 6.11.5.4.2.3 of [1] for 1.28Mcps TDD.

For 3.84Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbps (See Note), DL: 2Mbps plus support for 137 physical channels per frame, maximum TB bits 40960 (Alt. 81920), TB CC bits 1280, and TB TC bits 40960 (Alt. 81920).

This is supported in release 99.

For 1.28Mcps TDD the minimum UE classes supporting this combination are, UL: 128kbs plus support for SF 1, DL: 2Mbps plus support for maximum TB bits 40960 (Alt. 81920) and TB CC bits 1280.

This is supported in release 99.

7.3 Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH

7.3.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + interactive or background / UL:64 DL:256 kbps / PS RAB + UL:16.8 kbps SRBs for CCCH and SHCCH + DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

See clause 6.10.3.4.3.1 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for maximum TB CC bits 1280, and 2 physical channels per TS, DL: 384kbps plus support for maximum TB CC bits 1280.

This is supported in release 99.

7.3.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:16.8 kbps SRBs for CCCH and SHCCH + DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

See clause 6.10.3.4.3.2 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are, UL: 64kbps plus support for maximum TB CC bits 1280, and 2 physical channels per TS, DL: 384kbps plus support for maximum TB CC bits 1280.

This is supported in release 99.

7.3.3 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:16.8 kbps SRBs for CCCH and SHCCH + DL:33.6 kbps SRBs for CCCH, SHCCH and BCCH

See clause 6.10.3.4.3.3 of ~~TS 34.108~~[1]

The minimum UE classes supporting this combination are UL: 64kbps plus support for maximum TB CC bits 1280, and 2 physical channels per TS, DL: 384kbps plus support for maximum TB CC bits 1280, DL: 2048kbps plus support for maximum TB CC bits 1280. This is supported in release 99.

7.4 Combinations on SCCPCH

7.4.1 Stand – alone signalling RB for PCCH

See clause 6.10.3.4.4.1 of ~~TS 34.108~~[1]

The minimum UE class supporting this combination is DL: 32 kbps. This is supported by release 99

7.4.2 Interactive / Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

See clause 6.10.3.4.4.2 of ~~TS 34.108~~[1]

The minimum UE class supporting this combination is DL:64 kbps. This is supported by release 99.

7.4.3 Interactive / Background 32 kbps RAB + SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

See clause 6.10.3.4.4.3 of ~~TS 34.108~~[1]

The minimum UE class supporting this combination is DL: 64 kbps. This is supported by release 99.

7.5 Combinations on PRACH

7.5.1 SRB for CCCH + SRB for DCCH

See clause 6.10.3.4.5.1 of ~~TS 34.108~~[1]

The minimum UE class supporting this combination is UL: 32 kbps. This is supported by release 99.

~~6.1.1.3~~7.1.1.3. ~~UE capability~~

~~The UE capability needed in support of the radio configuration is XXX~~

87 Examples of Radio Bearers and signalling Radio Bearers for TDD UE capability

The UE capability needed in support of the radio configuration is XXX...

Annex X:
Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
09/2002	RP-17	RP-02XXX	-		creation	-	