
Source: SA1
Title: Rel-5 CR to 22.002 Correction of terminology and references
Document for: Approval
Agenda Item: 7.1.3

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020244	22.002	014		Rel-5	F	CR to 22.002 Correction of terminology and references	4.2.0	5.0.0	S1-021076

CR-Form-v4

CHANGE REQUEST

⌘ **22.002** CR **014** ⌘ ev **-** ⌘ Current version: **4.2.0** ⌘

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:	⌘ Introducing GERAN Iu mode service requirements		
Source:	⌘ SA1		
Work item code:	⌘ T.E.I.5	Date:	⌘ 11.05.2002
Category:	⌘ F	Release:	⌘ REL-5
	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) 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:	⌘ GERAN Iu mode uses the same Iu interface as UTRAN towards the Core Network while it will reuse the radio interface of GERAN A/Gb mode and consequently service requirements for CS data in GERAN Iu mode need to be updated. This CR suggests updates as follows: - GERAN Iu mode shall not support the data rates below 9.6 kbits/s and - GERAN Iu mode shall not support the transparent data rates that are supported by GERAN A/Gb, but not by UTRAN.
Summary of change:	⌘ Service requirements (restrictions) introduced for GERAN Iu mode. Appearance of all tables has been harmonized in order to improve readability.
Consequences if not approved:	⌘ No service requirements for CS data for GERAN Iu mode

Clauses affected:	⌘ 3.1		
Other specs affected:	⌘ <input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ 27.001	
Other comments:	⌘		

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.

3.1 General bearer service user data characteristics

The tables below describe the characteristics of the General Bearer Services. The indicated fixed network user rates are possible, but support of General Bearer Service does not imply support of all rates.

3.1.1 BS 20 (asynchronous services)

3.1.1.1 BS 20 T (transparent asynchronous services)

3.1.1.1.1 BS 20 transparent in regular mode for analogue interworking

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS attributes	Note
0.3 kbit/s	Asynch	3,1 kHz	-	†	Note 1
1.2 kbit/s	Asynch	3,1 kHz	-	†	Note 1
2.4 kbit/s	Asynch	3,1 kHz	-	†	Note 1
4.8 kbit/s	Asynch	3,1 kHz	-	†	Note 1
9.6 kbit/s	Asynch	3,1 kHz	-	†	Note 1
14.4 kbit/s	Asynch	3,1 kHz	-	†	Note 1
19.2 kbit/s	Asynch	3,1 kHz	-	†	Note 1
28.8 kbit/s	Asynch	3,1 kHz	-	†	
			-		

NOTE 1: Only applicable in GSM

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS attributes	UTRAN	GERAN lu mode	GERAN A/Gb mode	Notes
0.3 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
1.2 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
2.4 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
4.8 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
9.6 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
14.4 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
19.2 kbit/s	Asynch	3,1 kHz	-	†	-	-	Supported	
28.8 kbit/s	Asynch	3,1 kHz	-	†	Supported	Supported	Supported	

3.1.1.1.2 BS 20 transparent in regular mode for digital interworking

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	Notes
0.3 kbit/s	Asynch	UDI	V.110	†	Note 1
1.2 kbit/s	Asynch	UDI	V.110	†	Note 1
2.4 kbit/s	Asynch	UDI	V.110	†	Note 1
4.8 kbit/s	Asynch	UDI	V.110	†	Note 1
9.6 kbit/s	Asynch	UDI	V.110	†	Note 1
14.4 kbit/s	Asynch	UDI	V.110	†	Note 1
19.2 kbit/s	Asynch	UDI	V.110	†	Note 1
28.8 kbit/s	Asynch	UDI	V.110	†	Note 1
38.4 kbit/s	Asynch	UDI	V.110	†	Note 1

NOTE 1: Only applicable in GSM

<u>Fixed Network User Rate</u>	<u>Access Structure</u>	<u>Information Transfer Capability</u>	<u>Rate Adaptation</u>	<u>QoS Attribute</u>	<u>UTRAN</u>	<u>GERAN Iu mode</u>	<u>GERAN A/Gb mode</u>	<u>Notes</u>
0.3 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
1.2 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
2.4 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
4.8 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
9.6 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
14.4 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
19.2 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
28.8 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	
38.4 kbit/s	Asynch	UDI	V.110	I	-	-	Supported	

3.1.1.2 BS 20 NT (non-transparent asynchronous services)

3.1.1.2.1 BS 20 non-transparent in regular mode for analogue interworking

<u>Fixed Network User Rate</u>	<u>Access Structure</u>	<u>Information Transfer Capability</u>	<u>Rate Adaptation</u>	<u>QoS attributes</u>	<u>Note</u>
0.3 kbit/s	Asynch	3,1 kHz	-	NT	Note 2
1.2 kbit/s	Asynch	3,1 kHz	-	NT	Note 2
2.4 kbit/s	Asynch	3,1 kHz	-	NT	Note 2
4.8 kbit/s	Asynch	3,1 kHz	-	NT	Note 2
9.6 kbit/s	Asynch	3,1 kHz	-	NT	
14.4 kbit/s	Asynch	3,1 kHz	-	NT	
19.2 kbit/s	Asynch	3,1 kHz	-	NT	
28.8 kbit/s	Asynch	3,1 kHz	-	NT	
	Asynch	3,1 kHz	-	NT	Note 4

<u>Fixed Network User Rate</u>	<u>Access Structure</u>	<u>Information Transfer Capability</u>	<u>Rate Adaptation</u>	<u>QoS attributes</u>	<u>UTRAN</u>	<u>GERAN Iu mode</u>	<u>GERAN A/Gb mode</u>	<u>Note</u>
0.3 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	Note 2
1.2 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	Note 2
2.4 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	Note 2
4.8 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	Note 2
9.6 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	
14.4 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	
19.2 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	
28.8 kbit/s	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	
	Asynch	3,1 kHz	-	NT	Supported	Supported	Supported	Note 1

NOTE 1: This is used with high speed modems such as V.90 (56kbit/s). Modem type = 'Autobauding Type 1' is selected. FNUR has no meaning in this case.

NOTE 2: In case of UTRAN and in GERAN Iu mode the FNURs 300, 1200, 2400 and 4800 bit/s towards the fixed network can be provided only with modem type = 'Autobauding Type 1' is selected.

3.1.1.2.2 BS 20 non-transparent in regular mode for digital interworking

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
0.3 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 1
1.2 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 1
2.4 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 1
4.8 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 1
9.6 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
14.4 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
19.2 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
28.8 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
38.4 kbit/s	Asynch	UDI	V.110	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	

NOTE 1: In case of UTRAN and in GERAN Iu mode the user rates 300, 1200, 2400 and 4800 bit/s towards the fixed network can be provided only for mobile terminated calls.

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
1.2 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 2
2.4 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 2
4.8 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 2
9.6 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
14.4 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
19.2 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
28.8 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	Note 1
38.4 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
48 kbit/s	Asynch	UDI / RDI	V.120	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
56 kbit/s	Asynch	UDI	V.120	NT				

NOTE 1: Requires a new code point in V.120 specification to be defined.

NOTE 2: In case of UTRAN and in GERAN Iu mode the user rates 1200, 2400 and 4800 bit/s toward the fixed network can be provided only for mobile terminated calls.

3.1.1.2.3 BS 20 non-transparent for PIAFS

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
32 kbit/s	Asynch	UDI	PIAFS	NT	<u>Supported</u>	-	-	
64 kbit/s	Asynch	UDI	PIAFS	NT	<u>Supported</u>	-	-	

3.1.1.2.4 BS 20 non-transparent for Frame Tunnelling Mode

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
56kbit/s	Asynch	RDI	X.31 flag stuffing	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	
64 kbit/s	Asynch	UDI	X.31 flag stuffing	NT	<u>Supported</u>	<u>Supported</u>	<u>Supported</u>	

3.1.1.2 BS 30 (synchronous services)

3.1.2.1 BS 30 T (transparent synchronous services)

3.1.2.1.1 BS 30 transparent in regular mode for analogue interworking

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS attributes	Note
			-		
1.2 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
2.4 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
4.8 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
9.6 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
14.4 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
19.2 kbit/s	Synch	3,1 kHz	-	⊥	Note 1
28.8 kbit/s	Synch	3,1 kHz	-	⊥	

NOTE 1: Only applicable in GSM.

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS attributes	UTRAN	GERAN Iu mode	GERAN A/Gb	Notes
1.2 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
2.4 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
4.8 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
9.6 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
14.4 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
19.2 kbit/s	Synch	3,1 kHz	-	⊥	-	-	Supported	
28.8 kbit/s	Synch	3,1 kHz	-	⊥	Supported	Supported	Supported	

3.1.2.1.2 BS 30 transparent in regular mode for digital interworking

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	Notes
1.2 kbit/s	Synch	UDI	V.110	⊥	Note 1
2.4 kbit/s	Synch	UDI	V.110	⊥	Note 1
4.8 kbit/s	Synch	UDI	V.110	⊥	Note 1
9.6 kbit/s	Synch	UDI	V.110	⊥	Note 1
14.4 kbit/s	Synch	UDI	V.110	⊥	Note 1
19.2 kbit/s	Synch	UDI	V.110	⊥	Note 1
28.8 kbit/s	Synch	UDI	V.110	⊥	Note 1
38.4 kbit/s	Synch	UDI	V.110	⊥	Note 1
48 kbit/s	Synch	UDI	V.110	⊥	Note 1
56 kbit/s	Synch	UDI	V.110	⊥	
56 kbit/s	Synch	RDI	-	⊥	
64 kbit/s	Synch	UDI	-	⊥	

NOTE 1: Only applicable in GSM

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
1.2 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
2.4 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
4.8 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
9.6 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
14.4 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
19.2 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
28.8 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
38.4 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
48 kbit/s	Synch	UDI	V.110	T	-	-	Supported	
56 kbit/s	Synch	UDI	V.110	T	Supported	Supported	Supported	
56 kbit/s	Synch	RDI	-	T	Supported	Supported	Supported	
64 kbit/s	Synch	UDI	-	T	Supported	Supported	Supported	

3.1.2.1.3 BS 30 transparent for Multimedia

Fixed Network User Rate	Access Structure	Information Transfer Capability	Rate Adaptation	QoS Attribute	UTRAN	GERAN Iu mode	GERAN A/Gb mode	Notes
28.8 kbit/s	Synch	3.1kHz Audio	H.223 & H.245	T	Supported	Supported	Supported	
32.0 kbit/s	Synch	UDI	H.223 & H.245	T	Supported	Supported	Supported	
33.6 kbit/s	Synch	3.1kHz Audio	H.223 & H.245	T	Supported	Supported	Supported	Note_1
56 kbit/s	Synch	RDI	H.223 & H.245	T	Supported	Supported	Supported	
64 kbit/s	Synch	UDI	H.223 & H.245	T	Supported	Supported	Supported	

NOTE_1: 33.6kbit/s FNURs is applicable only for UTRAN.