

**Plenary Meeting #9, Oahu, Hawaii**  
**20<sup>th</sup> – 22<sup>nd</sup> September 2000.**

**Source:** TSG\_N WG 3  
**Title:** CRs to R99 Work Item T.E.I (CS Data Services) part 4 of 4  
**Agenda item:** 8.6.3  
**Document for:** APPROVAL

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**Introduction:**

This document contains **8** CRs on **R99** Work Item **CS Data Services**, that has been agreed by **TSG\_N WG3**, and is forwarded to TSG\_N Plenary meeting #9 for approval.

Doc-2nd-	Spec	CR	Rev	Phase	Subject	Cat	Version-
N3-000368	23.910	009		R99	Cleanup of RAB parameter setting	F	3.1.0
N3-000369	23.910	013		R00	Cleanup of RAB parameter setting	A	3.1.0
N3-000370	27.001	026		R99	Cleanup of RAB parameter setting	F	3.5.0
N3-000371	27.001	027		R00	Cleanup of RAB parameter setting	A	4.0.0
N3-000424	27.001	035		R99	Delivery of erroneous SDUs parameter value	F	3.5.0
N3-000425	27.001	040		R00	Delivery of erroneous SDUs parameter value	A	4.0.0
N3-000426	23.910	016		R99	Delivery of erroneous SDUs parameter value	F	3.1.0
N3-000427	23.910	015		R00	Delivery of erroneous SDUs parameter value	A	3.1.0

3GPP TSG-N3 #11  
Oslo, Norway 10<sup>th</sup>-14<sup>th</sup> July 2000

N3-000368

### CHANGE REQUEST

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

**23.910 CR 009**

Current Version: **3.1.0**

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

↑ CR number as allocated by MCC support team

For submission to: **TSG-N#9**

list expected approval meeting # here ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

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

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

**Source:** TSG\_N3 **Date:** 2000-06-09

**Subject:** Cleanup of RAB parameter setting

**Work item:** TEI

<b>Category:</b> <small>(only one category shall be marked with an X)</small>	F Correction <input checked="" type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/>
	A Corresponds to a correction in an earlier release <input type="checkbox"/>		Release 96 <input type="checkbox"/>
	B Addition of feature <input type="checkbox"/>		Release 97 <input type="checkbox"/>
	C Functional modification of feature <input type="checkbox"/>		Release 98 <input type="checkbox"/>
D Editorial modification <input type="checkbox"/>		Release 99 <input checked="" type="checkbox"/>	Release 00 <input type="checkbox"/>

**Reason for change:**

- 1) Upon recommendation from N3 to S2 to keep the streaming traffic class for NT data services (LS N3-000170), S2 has agreed to keep the value range as defined in 23.107, specifying a transfer delay minimum value of 250 ms. (LS answer S2-000995). This minimum value does not match with the currently specified value in table B.1.13.2, specifying < 250 ms. To align 23.107 with 23.910, and further on, to avoid interpretation of 250 ms being a maximum value, it is proposed to remove the inequality sign from the transfer delay value. It is also proposed to remove the inequality sign from the SDU error ratio.
- 2) According to agreed CR N3-000261, SDU sizes for T data need to be aligned accordingly.
- 3) According to agreed CR R3-0001454, a note has been added clarifying the relation between RAB subflow combination bit rates and maximum bit rate values.

**Clauses affected:** 5.2.1, 5.2.2, 6.2

<b>Other specs affected:</b>	Other 3G core specifications <input type="checkbox"/>	→ List of CRs:	23.910CR013, 27.001CR026 and 27.001CR027
	Other GSM core specifications <input type="checkbox"/>	→ List of CRs:	
	MS test specifications <input type="checkbox"/>	→ List of CRs:	
	BSS test specifications <input type="checkbox"/>	→ List of CRs:	
	O&M specifications <input type="checkbox"/>	→ List of CRs:	

**Other comments:**

## 5.2.1 Non-transparent services, including Fax

Service identified by the BC IE	Non-transparent data	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate (1)	14,4 kbit/s, 28,8 kbit/s, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
Guaranteed bit rate	14,4 kbit/s	Operator can choose 14,4 kbit/s, 28,8 kbit/s or 57,6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	$< 250$ ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	$\leq 10$ %	Subject to operator tuning
Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
Delivery of erroneous SDUs	No	
SDU format information		
RAB Subflow Combination bit rate	57,6 kbit/s	(note 2)
RAB Subflow Combination bit rate	28,8 kbit/s	(note 2)
RAB Subflow Combination bit rate	14,4 kbit/s	
RAB Subflow Combination bit rate	0 kbit/s	Indicates DTX, RFCI is not assigned
NOTE 1: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.		
NOTE 2: Only RAB subflow combination bit rates $\leq$ maximum bit rate shall be specified.		

### 5.2.2 Transparent Data, including Multimedia

Service identified by the BC IE	Transparent data and BS for support of multimedia service	Comments
Traffic Class	Conversational	Subject to operator tuning
Maximum bit rate	= guaranteed bit rate	
Guaranteed bit rate	FNUR = 64 .. 28.8 kbit/s	GBR for FNUR=56 kbit/s is 64 kbit/s (note 1)
Delivery Order	Yes	
Maximum SDU size	640 .. 280 bits (depending on the FNUR) for FNUR=32, 56 and 64 kbit/s 576 bits for FNUR=28.8 kbit/s	Maximum SDU size for FNUR=56 kbit/s is 640 bits (note 2)
Transfer Delay	< 200 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable for the conversational traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	-	Not applicable
Residual bit error ratio	10 <sup>-4</sup>	Subject to operator tuning according to 3G TS 23.107. Operator may also choose different value for Multimedia and other transparent data services.
Delivery of erroneous SDUs	-	No error detection in the core network
NOTE 1: In case the FNUR = 56 kbit/s, the GBR is set to 64 kbit/s. Last bit in each data octet is set to 1.		
NOTE 2: The maximum SDU size for FNUR=33.6 kbit/s is still under discussion.		

## 6 Iu User Plane

### 6.2 T services

The Iu UP is used in transparent mode, see 3G TS 25.415. The payload of the Iu frame will consist of user data bits only.

The payload (SDU) size is fixed, determined by the bit rate. Following table shows SDU size defined by GSM Association - IMT-2000 Steering Group (Typical Radio Interface Parameter Sets). AAL2 is used. The AAL2 SSCS layer must be supported for segmentation and re-assembly.

Bit rate	SDU size (= RLC PDU payload size)
28.8 kbit/s	[Editor's note] Waiting for decision by GSM Association 576 bits
33.6 kbit/s	[Editor's note] Waiting for decision by GSM Association
32 kbit/s	640 bits
56/64 kbit/s	640 bits

The primitive Iu-UP\_UNIT-DATA-REQUEST is invoked at regular intervals in order to have a constant bit rate (every SDU).

3GPP TSG-N3 #11  
Oslo, Norway 10<sup>th</sup>-14<sup>th</sup> July 2000

N3-000369

### CHANGE REQUEST

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

**23.910 CR 013**

Current Version: **3.1.0**

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

↑ CR number as allocated by MCC support team

For submission to: **TSG-N#9**

list expected approval meeting # here ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

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

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

**Source:** TSG\_N3 **Date:** 2000-06-09

**Subject:** Cleanup of RAB parameter setting

**Work item:** TEI

<b>Category:</b> <small>(only one category shall be marked with an X)</small>	F Correction	<input type="checkbox"/>	<b>Release:</b>	Phase 2	<input type="checkbox"/>
	A Corresponds to a correction in an earlier release	<input checked="" type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>	Release 99	<input type="checkbox"/>	
			Release 00	<input checked="" type="checkbox"/>	

**Reason for change:**

- 1) Upon recommendation from N3 to S2 to keep the streaming traffic class for NT data services (LS N3-000170), S2 has agreed to keep the value range as defined in 23.107, specifying a transfer delay minimum value of 250 ms. (LS answer S2-000995). This minimum value does not match with the currently specified value in table B.1.13.2, specifying < 250 ms. To align 23.107 with 23.910, and further on, to avoid interpretation of 250 ms being a maximum value, it is proposed to remove the inequality sign from the transfer delay value. It is also proposed to remove the inequality sign from the SDU error ratio.
- 2) According to agreed CR N3-000261, SDU sizes for T data need to be aligned accordingly.
- 3) According to agreed CR R3-0001454, a note has been added clarifying the relation between RAB subflow combination bit rates and maximum bit rate values.

**Clauses affected:** 5.2.1, 5.2.2, 6.2

<b>Other specs affected:</b>	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	23.910CR009, 27.001CR026 and 27.001CR027
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

**Other comments:**

## 5.2.1 Non-transparent services, including Fax

Service identified by the BC IE	Non-transparent data	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate (1)	14,4 kbit/s, 28,8 kbit/s, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
Guaranteed bit rate	14,4 kbit/s	Operator can choose 14,4 kbit/s, 28,8 kbit/s or 57,6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	$\leq$ 250 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	$\leq$ 10 %	Subject to operator tuning
Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
Delivery of erroneous SDUs	No	
SDU format information		
RAB Subflow Combination bit rate	57,6 kbit/s	(note 2)
RAB Subflow Combination bit rate	28,8 kbit/s	(note 2)
RAB Subflow Combination bit rate	14,4 kbit/s	
RAB Subflow Combination bit rate	0 kbit/s	Indicates DTX, RFCI is not assigned
NOTE 1: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.		
NOTE 2: Only RAB subflow combination bit rates $\leq$ maximum bit rate shall be specified.		

## 5.2.2 Transparent Data, including Multimedia

Service identified by the BC IE	Transparent data and BS for support of multimedia service	Comments
Traffic Class	Conversational	Subject to operator tuning
Maximum bit rate	= guaranteed bit rate	
Guaranteed bit rate	FNUR = 64 .. 28.8 kbit/s	GBR for FNUR=56 kbit/s is 64 kbit/s (note 1)
Delivery Order	Yes	
Maximum SDU size	640 .. 280 bits (depending on the FNUR) for FNUR=32, 56 and 64 kbit/s 576 bits for FNUR=28.8 kbit/s	Maximum SDU size for FNUR=56 kbit/s is 640 bits (note 2)
Transfer Delay	< 200 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable for the conversational traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	-	Not applicable
Residual bit error ratio	10 <sup>-4</sup>	Subject to operator tuning according to 3G TS 23.107. Operator may also choose different value for Multimedia and other transparent data services.
Delivery of erroneous SDUs	-	No error detection in the core network
NOTE 1: In case the FNUR = 56 kbit/s, the GBR is set to 64 kbit/s. Last bit in each data octet is set to 1.		
NOTE 2: The maximum SDU size for FNUR=33.6 kbit/s is still under discussion.		

## 6 Iu User Plane

### 6.2 T services

The Iu UP is used in transparent mode, see 3G TS 25.415. The payload of the Iu frame will consist of user data bits only.

The payload (SDU) size is fixed, determined by the bit rate. Following table shows SDU size defined by GSM Association - IMT-2000 Steering Group (Typical Radio Interface Parameter Sets). AAL2 is used. The AAL2 SSCS layer must be supported for segmentation and re-assembly.

Bit rate	SDU size (= RLC PDU payload size)
28.8 kbit/s	[Editor's note] Waiting for decision by GSM Association 576 bits
33.6 kbit/s	[Editor's note] Waiting for decision by GSM Association
32 kbit/s	640 bits
56/64 kbit/s	640 bits

The primitive Iu-UP\_UNIT-DATA-REQUEST is invoked at regular intervals in order to have a constant bit rate (every SDU).

**3GPP TSG-N3 #11**  
**Oslo, Norway 10<sup>th</sup>-14<sup>th</sup> July 2000**

**N3-000370**

<b>CHANGE REQUEST</b>				<i>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</i>	
<b>27.001</b>		<b>CR</b>		<b>026</b>	
Current Version: <b>3.5.0</b>					
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team			
For submission to: <b>TSG-N#9</b>		for approval <input checked="" type="checkbox"/>		strategic <input type="checkbox"/>	
<i>list expected approval meeting # here</i>		for information <input type="checkbox"/>		non-strategic <input type="checkbox"/> <i>(for SMG use only)</i>	
Form: CR cover sheet, version 2 for 3GPP and SMG    The latest version of this form is available from: <a href="ftp://ftp.3gpp.org/Information/CR-Form-v2.doc">ftp://ftp.3gpp.org/Information/CR-Form-v2.doc</a>					

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

**Source:** TSG\_N3 **Date:** 2000-06-09

**Subject:** Cleanup of RAB parameter setting

**Work item:** TEI

<b>Category:</b> <i>(only one category shall be marked with an X)</i>	F Correction <input checked="" type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/>
	A Corresponds to a correction in an earlier release <input type="checkbox"/>		Release 96 <input type="checkbox"/>
	B Addition of feature <input type="checkbox"/>		Release 97 <input type="checkbox"/>
	C Functional modification of feature <input type="checkbox"/>		Release 98 <input type="checkbox"/>
	D Editorial modification <input type="checkbox"/>		Release 99 <input checked="" type="checkbox"/>
			Release 00 <input type="checkbox"/>

**Reason for change:**

- 1) Upon recommendation from N3 to S2 to keep the streaming traffic class for NT data services (LS N3-000170), S2 has agreed to keep the value range as defined in 23.107, specifying a transfer delay minimum value of 250 ms. (LS answer S2-000995). This minimum value does not match with the currently specified value in table B.1.13.2, specifying < 250 ms. To align 23.107 with 27.001, and further on, to avoid interpretation of 250 ms being a maximum value, it is proposed to remove the inequality sign from the transfer delay value. It is also proposed to remove the inequality sign from the SDU error ratio value.
- 2) According to agreed CR N3-000261, SDU sizes for T data need to be aligned accordingly.
- 3) According to agreed CR R3-0001454, a note has been added clarifying the relation between RAB subflow combination bit rates and maximum bit rate values.

**Clauses affected:** B.1.13.1, B1.13.2

<b>Other specs affected:</b>	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs: 23.910CR009, 23.910CR013 and 27.001CR027
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:
	MS test specifications	<input type="checkbox"/>	→ List of CRs:
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:
	O&M specifications	<input type="checkbox"/>	→ List of CRs:

**Other comments:**



### B.1.13.1 Transparent Services

Depending on the FNUR negotiated between the network and the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
<b>Traffic Class</b>	Conversational	Subject to operator tuning
<b>RAB Asymmetry Indicator</b>	Symmetric	
<b>Maximum bit rate</b>	= guaranteed bit rate	
<b>Guaranteed bit rate</b>	FNUR = 64 .. 28,8 kbit/s	GBR for FNUR=56 kbit/s is 64 kbit/s <a href="#">(note 1)</a>
<b>Delivery Order</b>	Yes	
<b>Maximum SDU size</b>	640 ... <del>288</del> bits <a href="#">for FNUR = 32, 56 and 64 kbit/s (depending on the FNUR)</a> <a href="#">576 bits for FNUR = 28.8 kbit/s</a>	<del>Maximum SDU size for FNUR=56 kbit/s is 640 bits</del> <a href="#">(note 2)</a>
<b>Transfer Delay</b>	< 200 ms	Subject to operator tuning
<b>Traffic Handling Priority</b>	-	Not applicable for the conversational traffic class
<b>Source statistics descriptor</b>	Unknown	
<b>SDU Parameters</b>		
<b>SDU error ratio</b>	-	Not applicable
<b>Residual bit error ratio</b>	$10^{-4}$	Subject to operator tuning according to 3G TS 23.107. Operator may also choose different value for Multimedia and other transparent data services.
<b>Delivery of erroneous SDUs</b>	-	No error detection in the core network
<a href="#">Note 1: In case the FNUR = 56 kbit/s, the GBR is set to 64 kbit/s. Last bit in each data octet is set to 1</a>		
<a href="#">Note 2: The maximum SDU size for bit rate 33.6 kbit/s is still under discussion.</a>		

The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.

### B.1.13.2 Non-transparent services

Depending on the WAIUR signalled by the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate	14.4, 28.8, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
Guaranteed bit rate	14.4 kbit/s	Operator can choose 14.4, 28.8 or 57.6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	$\leq$ 250 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	$\leq$ 10 %	Subject to operator tuning
Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
Delivery of erroneous SDUs	No	
SDU format information		
RAB Subflow Combination bit rate	57.6 kbit/s	(note 2)
RAB Subflow Combination bit rate	28.8 kbit/s	(note 2)
RAB Subflow Combination bit rate	14.4 kbit/s	
RAB Subflow Combination bit rate	0 kbit/s	Indicates DTX, RFCI is not assigned
<p><b>NOTE 1:</b> <u>In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.</u></p> <p><b>NOTE 2:</b> <u>Only RAB subflow combination bit rates <math>\leq</math> maximum bit rate shall be specified.</u></p>		

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

The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.



### B.1.13.1 Transparent Services

Depending on the FNUR negotiated between the network and the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
<b>Traffic Class</b>	Conversational	Subject to operator tuning
<b>RAB Asymmetry Indicator</b>	Symmetric	
<b>Maximum bit rate</b>	= guaranteed bit rate	
<b>Guaranteed bit rate</b>	FNUR = 64 .. 28,8 kbit/s	GBR for FNUR=56 kbit/s is 64 kbit/s <a href="#">(note 1)</a>
<b>Delivery Order</b>	Yes	
<b>Maximum SDU size</b>	640 ... <del>288</del> bits <a href="#">for FNUR = 32, 56 and 64 kbit/s (depending on the FNUR)</a> <a href="#">576 bits for FNUR = 28.8 kbit/s</a>	<del>Maximum SDU size for FNUR=56 kbit/s is 640 bits</del> <a href="#">(note 2)</a>
<b>Transfer Delay</b>	< 200 ms	Subject to operator tuning
<b>Traffic Handling Priority</b>	-	Not applicable for the conversational traffic class
<b>Source statistics descriptor</b>	Unknown	
<b>SDU Parameters</b>		
<b>SDU error ratio</b>	-	Not applicable
<b>Residual bit error ratio</b>	$10^{-4}$	Subject to operator tuning according to 3G TS 23.107. Operator may also choose different value for Multimedia and other transparent data services.
<b>Delivery of erroneous SDUs</b>	-	No error detection in the core network
<a href="#">Note 1: In case the FNUR = 56 kbit/s, the GBR is set to 64 kbit/s. Last bit in each data octet is set to 1</a>		
<a href="#">Note 2: The maximum SDU size for bit rate 33.6 kbit/s is still under discussion.</a>		

The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.

### B.1.13.2 Non-transparent services

Depending on the WAIUR signalled by the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate	14.4, 28.8, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
Guaranteed bit rate	14.4 kbit/s	Operator can choose 14.4, 28.8 or 57.6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	$\leq$ 250 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	$\leq$ 10 %	Subject to operator tuning
Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
Delivery of erroneous SDUs	No	
SDU format information		
RAB Subflow Combination bit rate	57.6 kbit/s	(note 2)
RAB Subflow Combination bit rate	28.8 kbit/s	(note 2)
RAB Subflow Combination bit rate	14.4 kbit/s	
RAB Subflow Combination bit rate	0 kbit/s	Indicates DTX, RFCI is not assigned
<p><u>NOTE 1: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.</u></p> <p><u>NOTE 2: Only RAB subflow combination bit rates <math>\leq</math> maximum bit rate shall be specified.</u></p>		

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

The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.

## CHANGE REQUEST

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

**27.001 CR 035**

Current Version: **3.5.0**

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

↑ CR number as allocated by MCC support team

For submission to: **CN#9**

list expected approval meeting # here ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

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

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

**Source:** TSG\_CN3 **Date:** 2000-08-17

**Subject:** Delivery of erroneous SDUs parameter value

**Work item:** TEI

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

**Reason for change:** 3G TS 25.413 defines three possible values for the 'Delivery of erroneous SDUs' parameter:  
Yes: error detection applied, erroneous SDU delivered  
No: Error detection is applied, erroneous SDU discarded  
no-error-detection-consideration: SDUs delivered without considering error detection.  
For NT bearers, the third option is appropriate, since RLP provides the error detection mechanism.

**Clauses affected:**

**Other specs affected:** Other 3G core specifications  → List of CRs: 23.910 CR ??  
Other GSM core specifications  → List of CRs:  
MS test specifications  → List of CRs:  
BSS test specifications  → List of CRs:  
O&M specifications  → List of CRs:

**Other comments:**



help.doc

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

### B.1.13.2 Non-transparent services

Depending on the WAIUR signalled by the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
<b>Traffic Class</b>	Streaming	Subject to operator tuning
<b>RAB Asymmetry Indicator</b>	Symmetric	
<b>Maximum bit rate</b>	14.4, 28.8, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
<b>Guaranteed bit rate</b>	14.4 kbit/s	Operator can choose 14.4, 28.8 or 57.6 kbit/s.
<b>Delivery Order</b>	Yes	
<b>Maximum SDU size</b>	576 bits	
<b>Transfer Delay</b>	< 250 ms	Subject to operator tuning
<b>Traffic Handling Priority</b>	-	Not applicable to the streaming traffic class
<b>Source statistics descriptor</b>	Unknown	
<b>SDU Parameters</b>		
<b>SDU error ratio</b>	< 10 %	Subject to operator tuning
<b>Residual bit error ratio</b>	$10^{-3}$	Subject to operator tuning.
<b>Delivery of erroneous SDUs</b>	<del>No error detection</del> <u>consideration</u>	
<b>SDU format information</b>		
<b>RAB Subflow Combination bit rate</b>	57.6 kbit/s	
<b>RAB Subflow Combination bit rate</b>	28.8 kbit/s	
<b>RAB Subflow Combination bit rate</b>	14.4 kbit/s	
<b>RAB Subflow Combination bit rate</b>	0 kbit/s	indicates DTX, RFCI is not assigned

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

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The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.

## CHANGE REQUEST

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

**27.001 CR 040**

Current Version: **4.0.0**

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

↑ CR number as allocated by MCC support team

For submission to: **CN#9**

list expected approval meeting # here ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

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

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

**Source:** TSG\_N3 **Date:** 2000-08-17

**Subject:** Delivery of erroneous SDUs parameter value

**Work item:** TEI

<b>Category:</b> (only one category shall be marked with an X)	F Correction	<input type="checkbox"/>	<b>Release:</b>	Phase 2	<input type="checkbox"/>
	A Corresponds to a correction in an earlier release	<input checked="" type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>		Release 99	<input type="checkbox"/>
			Release 00	<input checked="" type="checkbox"/>	

**Reason for change:** 3G TS 25.413 defines three possible values for the 'Delivery of erroneous SDUs' parameter:  
 Yes: error detection applied, erroneous SDU delivered  
 No: Error detection is applied, erroneous SDU discarded  
 no-error-detection-consideration: SDUs delivered without considering error detection.  
 For NT bearers, the third option is appropriate, since RLP provides the error detection mechanism.

**Clauses affected:**

<b>Other specs affected:</b>	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	23.910 CR 15
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

**Other comments:**



help.doc

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



### B.1.13.2 Non-transparent services

Depending on the WAIUR signalled by the MS, the network is allowed to assign any radio resources with a radio access bearer parameter indicating a Quality of Service specifying

QoS Parameter	Value	Comments
<b>Traffic Class</b>	Streaming	Subject to operator tuning
<b>RAB Asymmetry Indicator</b>	Symmetric	
<b>Maximum bit rate</b>	14.4, 28.8, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note 1)
<b>Guaranteed bit rate</b>	14.4 kbit/s	Operator can choose 14.4, 28.8 or 57.6 kbit/s.
<b>Delivery Order</b>	Yes	
<b>Maximum SDU size</b>	576 bits	
<b>Transfer Delay</b>	< 250 ms	Subject to operator tuning
<b>Traffic Handling Priority</b>	-	Not applicable to the streaming traffic class
<b>Source statistics descriptor</b>	Unknown	
<b>SDU Parameters</b>		
<b>SDU error ratio</b>	< 10 %	Subject to operator tuning
<b>Residual bit error ratio</b>	$10^{-3}$	Subject to operator tuning.
<b>Delivery of erroneous SDUs</b>	<del>No error detection</del> <u>consideration</u>	
<b>SDU format information</b>		
<b>RAB Subflow Combination bit rate</b>	57.6 kbit/s	
<b>RAB Subflow Combination bit rate</b>	28.8 kbit/s	
<b>RAB Subflow Combination bit rate</b>	14.4 kbit/s	
<b>RAB Subflow Combination bit rate</b>	0 kbit/s	indicates DTX, RFCI is not assigned

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

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The final decision about the radio interface configuration is taken by the RNC during the Assignment procedure.

**3GPP N3 Meeting #12**  
**Seattle, USA, 28 Aug-1 Sept 2000**

**Document N3-000426**

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

<b>CHANGE REQUEST</b>		<small>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</small>	
<b>23.910</b>	<b>CR</b>	<b>016</b>	Current Version: <b>3.1.0</b>
<small>GSM (AA.BB) or 3G (AA.BBB) specification number ↑</small>		<small>↑ CR number as allocated by MCC support team</small>	
For submission to: <b>CN#9</b> <small>list expected approval meeting # here ↑</small>	for approval for information	<input checked="" type="checkbox"/>	strategic <input type="checkbox"/> non-strategic <input type="checkbox"/> <small>(for SMG use only)</small>

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

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

**Source:** TSG\_N3 **Date:** 2000-08-24

**Subject:** Delivery of erroneous SDUs parameter value

**Work item:** TEI

<b>Category:</b> <small>(only one category shall be marked with an X)</small>	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
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**Reason for change:** 3G TS 25.413 defines three possible values for the 'Delivery of erroneous SDUs' parameter:  
 Yes: error detection applied, erroneous SDU delivered  
 No: Error detection is applied, erroneous SDU discarded  
*no-error-detection-consideration*: SDUs delivered without considering error detection.  
 For NT bearers, the third option is appropriate, since RLP provides the error detection mechanism.

**Clauses affected:**

<b>Other specs affected:</b>	Other 3G core specifications <input type="checkbox"/> → List of CRs: 27.001 CR 035 Other GSM core specifications <input type="checkbox"/> → List of CRs: MS test specifications <input type="checkbox"/> → List of CRs: BSS test specifications <input type="checkbox"/> → List of CRs: O&M specifications <input type="checkbox"/> → List of CRs:
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**Other comments:**

### 5.2.1 Non-transparent services, including Fax

Service identified by the BC IE	Non-transparent data	Comments
Traffic Class	Streaming	Subject to operator tuning
RAB Asymmetry Indicator	Symmetric	
Maximum bit rate (1)	14,4 kbit/s, 28,8 kbit/s, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note)
Guaranteed bit rate	14,4 kbit/s	Operator can choose 14,4 kbit/s, 28,8 kbit/s or 57,6 kbit/s.
Delivery Order	Yes	
Maximum SDU size	576 bits	
Transfer Delay	< 250 ms	Subject to operator tuning
Traffic Handling Priority	-	Not applicable to the streaming traffic class
Source statistics descriptor	Unknown	
SDU Parameters		
SDU error ratio	< 10 %	Subject to operator tuning
Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
Delivery of erroneous SDUs	<b>Neno error detection consideration</b>	
SDU format information		
RAB Subflow Combination bit rate	57,6 kbit/s	
RAB Subflow Combination bit rate	28,8 kbit/s	
RAB Subflow Combination bit rate	14,4 kbit/s	
RAB Subflow Combination bit rate	0 kbit/s	indicates DTX, RFCI is not assigned
NOTE: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.		

3GPP N3 Meeting #12  
Seattle, USA, 28 Aug-1 Sept 2000

Document **N3-000427**

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

### CHANGE REQUEST

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

**23.910 CR 015**

Current Version: **3.1.0**

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

↑ CR number as allocated by MCC support team

For submission to: **CN#9**  
*list expected approval meeting # here* ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

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

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

**Source:** TSG\_N3 **Date:** 2000-08-24

**Subject:** Delivery of erroneous SDUs parameter value

**Work item:** TEI

<b>Category:</b> <i>(only one category shall be marked with an X)</i>	F Correction	<input type="checkbox"/>	<b>Release:</b>	Phase 2	<input type="checkbox"/>
	A Corresponds to a correction in an earlier release	<input checked="" type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
D Editorial modification	<input type="checkbox"/>	Release 99	<input type="checkbox"/>	Release 00	<input checked="" type="checkbox"/>

**Reason for change:** 3G TS 25.413 defines three possible values for the 'Delivery of erroneous SDUs' parameter:  
Yes: error detection applied, erroneous SDU delivered  
No: Error detection is applied , erroneous SDU discarded  
*no-error-detection-consideration*: SDUs delivered without considering error detection.  
For NT bearers, the third option is appropriate, since RLP provides the error detection mechanism.

**Clauses affected:**

<b>Other specs affected:</b>	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	27.001 CR 40
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

**Other comments:**

### 5.2.1 Non-transparent services, including Fax

Service identified by the BC IE		Non-transparent data	Comments
Traffic Class		Streaming	Subject to operator tuning
RAB Asymmetry Indicator		Symmetric	
Maximum bit rate (1)		14,4 kbit/s, 28,8 kbit/s, 57.6 kbit/s	Maximum bit rate is set to the highest value $\leq$ WAIUR (note)
Guaranteed bit rate		14,4 kbit/s	Operator can choose 14,4 kbit/s, 28,8 kbit/s or 57,6 kbit/s.
Delivery Order		Yes	
Maximum SDU size		576 bits	
Transfer Delay		< 250 ms	Subject to operator tuning
Traffic Handling Priority		-	Not applicable to the streaming traffic class
Source statistics descriptor		Unknown	
SDU Parameters			
	SDU error ratio	< 10 %	Subject to operator tuning
	Residual bit error ratio	$10^{-3}$	Subject to operator tuning.
	Delivery of erroneous SDUs	<b>Neno error detection consideration</b>	
SDU format information			
	RAB Subflow Combination bit rate	57,6 kbit/s	
	RAB Subflow Combination bit rate	28,8 kbit/s	
	RAB Subflow Combination bit rate	14,4 kbit/s	
	RAB Subflow Combination bit rate	0 kbit/s	indicates DTX, RFCI is not assigned
NOTE: In case the WAIUR is less than Guaranteed bit rate, the Maximum bit rate is set to the Guaranteed bit rate.			