TSG RAN Meeting #22 **RP-030684**
Maui, USA, 9 - 12 December 2003

Title **CRs (Rel-5 only) to TS 25.402, TS 25.423 and TS 25.433 on Removal of the ambiguity about the activation time**
Source **TSG RAN WG3**
Agenda Item **7.4.6**

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-031772	25.402	5.2.0	5.3.0	REL-5	042	1	F	Removal of the ambiguity about the activation time	TEI
R3-031773	25.423	5.7.0	5.8.0	REL-5	885	1	F	Removal of the ambiguity about the activation time	TEI
R3-031774	25.433	5.6.0	5.7.0	REL-5	931	1	F	Removal of the ambiguity about the activation time	TEI

3GPP TSG-RAN3 Meeting #39 **R3-031772**
San Diego, California, USA, 17th – 21st November 2003

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CHANGE REQUEST

⌘ **25.402** **CR** **042** ⌘ **rev** **1** ⌘ Current version: **5.2.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Removal of the ambiguity about the activation time
Source:	⌘	RAN3
Work item code:	⌘	TEI5
Date:	⌘	17/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one 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 one 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)*
Rel-6 *(Release 6)*

Reason for change: ⌘ In the e-mail discussion (R3-031642), it was clarified that the SRNC should include a "correct CFN" in the RL Reconfiguration Commit message. However, it is unclear in the current specifications which node, i.e. SRNC or Node B, should have a responsibility to ensure that the new configuration is activated at the TTI boundary. In RRC, the UE needs to adjust the activation time if the activation time informed by the SRNC is not the TTI boundary.
The chapter 9.4 of TS25.402 states that the serving RNC decides appropriate change time. However, what the "appropriate change time" indicates is not clear.

Summary of change: ⌘ Rev.1
- Reference for TDD (TS25.222, 4.2.13) is added.
- CR cover page is revised since the change is reflected from Rel5.

Rev.0
The "appropriate change time" refers to the chapter 4.2.14 of TS25.212 which states the condition of the activation time.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

This CR has [isolated impact] with the previous version of the specification (same release) because it might affect only the activation timing of the new configuration.

This CR has an impact under [functional] point of view.
The impact [can] be considered isolated because the change affects [one] [system function] namely the Synchronised RL reconfiguration.

Consequences if not approved:	⌘	If this CR is not approved, it is still unclear what the “appropriate change time” indicates and the SRNC possibly includes a "incorrect CFN" in the RL Reconfiguration Commit message. As a result, there might be an inter-operability problem in the multi-vender environment, e.g. if the different implementation Node Bs (“adjust the activation time” and “reject the request”) are involved in an active set, some RLs have the new configuration and other RLs do not have the new configuration, then the call might be dropped since the UE can not obtain the soft-combining gain.

Clauses affected:	⌘	2 and 9.4			
		Y	**N**		
Other specs	⌘	**X**		Other core specifications	⌘ CR885 on TS25.423v5.7.0 CR931 on TS25.433v5.6.0
affected:			**X**	Test specifications	
			X	O&M Specifications	
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/specs/CR.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.

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 25.401: "UTRAN Overall Description".

[2] 3GPP TS 25.423: "UTRAN Iur Interface RNSAP Signalling".

[3] 3GPP TS 25.433: "UTRAN Iub Interface NBAP Signalling".

[4] 3GPP TS 25.435: "UTRAN Iub Interface User Plane Protocols for COMMON TRANSPORT CHANNEL Data Streams".

[5] 3GPP TS 25.427: "Iub/Iur Interface User Plane Protocol for DCH Data Streams".

[6] TIA/EIA 422 B: "Electrical characteristics of balanced voltage digital interface circuits".

[7] 3GPP TS 25.411: "UTRAN Iu Interface Layer 1".

[8] 3GPP TS 25.421: "UTRAN Iur Interface Layer 1".

[9] 3GPP TS 25.431: "UTRAN Iub Interface Layer 1".

[10] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception".

[11] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".

[12] 3GPP TS 25.223: "Spreading and modulation (TDD)".

[13] 3GPP TS 25.215: "Physical layer - Measurements (FDD)".

[14] 3GPP TS 25.225: "Physical layer - Measurements (TDD)".

[15] 3GPP TS 25.123: "Requirements for Support of Radio Resource Management (TDD)".

[16] 3GPP TS 25.224: "Physical Layer Procedures (TDD)".

[17] 3GPP TS 25.105: "UTRA (BS) TDD, Radio transmission and Reception".

[18] ITU-T Recommendation G.811 (09/1997): "Timing Characteristics of Primary Reference Clocks".

[19] ITU-T Recommendation G.812 (06/1998): "Timing Requirements of Slave Clocks suitable for use as Node Clocks in Synchronization Network".

[20] ITU-T Recommendation G.813 (08/1996): "Timing Characteristics of SDH equipment slave clocks (SEC)".

[21] ETSI EN 300 462-4-1(03/1998): "Transmission and Multiplexing (TM); Generic requirements for synchronization networks; Part 4-1: Timing characteristics of slave clocks suitable for synchronization supply to Synchronous Digital Hierarchy (SDH) and Plesiochronous Digital Hierarchy (PDH) equipment".

[22] ETSI EN 300 462-5-1 (09/1996):"Transmission and Multiplexing (TM); Generic requirements for synchronization networks; Part 5-1: Timing characteristics of slave clocks suitable for operation in Synchronous Digital Hierarchy (SDH) equipment".

[23] ETSI EN 300 462-7-1 (04/2001): "Transmission and Multiplexing (TM); Generic requirements for synchronization networks; Part 7-1: Timing characteristics of slave clocks suitable for synchronisation supply to equipment in local node applications".

[xx] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".

[yy] 3GPP TS 25.222: "Multiplexing and channel coding (TDD)".

<not affected part is omitted>

9.4 Synchronisation of L1 configuration changes

When a synchronised L1 configuration change shall be made, the SRNC commands the related Node B's to prepare for the change. When preparations are completed and SRNC informed, serving RNC decides appropriate change time (see ref.[xx], subclause 4.2.14 and ref.[yy], subclause 4.2.13). SRNC tells the CFN for the change by a suitable RRC message. The Node B's are informed the CFN by RNSAP and NBAP Synchronised Radio Link Reconfiguration procedures.

At indicated switch time UE and Node B's change the L1 configuration.

3GPP TSG-RAN3 Meeting #39 ***R3-031773***
San Diego, California, USA, 17th – 21st November 2003

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CHANGE REQUEST

⌘ **25.423** **CR** **885** ⌘ **rev** **1** ⌘ Current version: **5.7.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Removal of the ambiguity about the activation time
Source:	⌘	RAN3
Work item code:	⌘	TEI5
Date:	⌘	17/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
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D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
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R96 *(Release 1996)*
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R98 *(Release 1998)*
R99 *(Release 1999)*
Rel-4 *(Release 4)*
Rel-5 *(Release 5)*
Rel-6 *(Release 6)*

Reason for change:	⌘	In the e-mail discussion (R3-031642), it was clarified that the SRNC should include a "correct CFN" in the RL Reconfiguration Commit message. However, it is unclear in the current specifications which node, i.e. SRNC or Node B, should have a responsibility to ensure that the new configuration is activated at the TTI boundary. In RRC, the UE needs to adjust the activation time if the activation time informed by the SRNC is not the TTI boundary.
Summary of change:	⌘	Rev.1 - CR cover page is revised since the change is reflected from Rel5. Rev.0 The CFN IE refers to the chapter 9.4 of TS25.402 which states the condition of the activation time. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has [isolated impact] with the previous version of the specification (same release) because it might affect only the activation timing of the new configuration. This CR has an impact under [functional] point of view. The impact [can] be considered isolated because the change affects [one] [system function] namely the Synchronised RL reconfiguration.
Consequences if not approved:	⌘	If this CR is not approved, it is still unclear that SRNC should include a "correct CFN" in the RL Reconfiguration Commit message. As a result, the SRNC possibly includes a "incorrect CFN" in the RL Reconfiguration Commit message.

	Then, there might be an inter-operability problem in the multi-vender environment, e.g. if the different implementation Node Bs (“adjust the activation time” and “reject the request”) are involved in an active set, some RLs have the new configuration and other RLs do not have the new configuration, then the call might be dropped since the UE can not obtain the soft-combining gain.

Clauses affected:	⌘	8.3.5.2			
		Y	**N**		
Other specs	⌘	**X**		Other core specifications	⌘ CR042 on TS25.402v5.2.0 CR931 on TS25.433v5.6.0
affected:			**X**	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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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.

8.3.5 Synchronised Radio Link Reconfiguration Commit

8.3.5.1 General

This procedure is used to order the DRNS to switch to the new configuration for the Radio Link(s) within the DRNS, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

8.3.5.2 Successful Operation

Figure 12: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The DRNS shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the SRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.

3GPP TSG-RAN3 Meeting #39 ***R3-031774***
San Diego, California, USA, 17th – 21st November 2003

CR-Form-v7

CHANGE REQUEST

⌘ **25.433** **CR** **931** ⌘ **rev** **1** ⌘ Current version: **5.6.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Removal of the ambiguity about the activation time
Source:	⌘	RAN3
Work item code:	⌘	TEI5
Date:	⌘	17/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
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Reason for change: ⌘ In the e-mail discussion (R3-031642), it was clarified that the SRNC should include a "correct CFN" in the RL Reconfiguration Commit message. However, it is unclear in the current specifications which node, i.e. SRNC or Node B, should have a responsibility to ensure that the new configuration is activated at the TTI boundary. In RRC, the UE needs to adjust the activation time if the activation time informed by the SRNC is not the TTI boundary.

Summary of change: ⌘

Rev.1
- CR cover page is revised since the change is reflected from Rel5.

Rev.0
The CFN IE refers to the chapter 9.4 of TS25.402 which states the condition of the activation time.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

This CR has [isolated impact] with the previous version of the specification (same release) because it might affect only the activation timing of the new configuration.

This CR has an impact under [functional] point of view.
The impact [can] be considered isolated because the change affects [one] [system function] namely the Synchronised RL reconfiguration.

Consequences if not approved: ⌘ If this CR is not approved, it is still unclear that SRNC should include a "correct CFN" in the RL Reconfiguration Commit message. As a result, the SRNC possibly includes a "incorrect CFN" in the RL Reconfiguration Commit message.

	Then, there might be an inter-operability problem in the multi-vender environment, e.g. if the different implementation Node Bs (“adjust the activation time” and “reject the request”) are involved in an active set, some RLs have the new configuration and other RLs do not have the new configuration, then the call might be dropped since the UE can not obtain the soft-combining gain.

Clauses affected:	⌘	8.3.3.2			
		Y	**N**		
Other specs	⌘	**X**		Other core specifications	⌘ CR042 on TS25.402v5.2.0 CR885 on TS25.423v5.7.0
affected:			**X**	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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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.

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation

Figure 32:Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.