TSG RAN Meeting #21 RP-030438

Frankfurt, Germany, 16 - 19 September 2003

Title CRs (Rel-4 and Rel-5 Category A) to TS 25.419 on Correction of number of

broadcast to be reported

Source TSG RAN WG3

Agenda Item 7.4.4

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-031249	25.419	4.8.0	4.9.0	REL-4	123	2	F	Correction of number of broadcast to be reported	TEI4
R3-031250	25.419	5.4.0	5.5.0	REL-5	124	2	A	Correction of number of broadcast to be reported	TEI4

3GPP TSG-RAN3 Meeting #37 Budapest, Hungary, 25th-29th August 2003

Tdoc #R3-031249

										CR-Form-v7
			_	CHANGE	DEO	115	СТ	•		Ort Tollin VI
			C	HANGE	REW	UE	J I			
æ		05 440	00	400		2	Φ	Current version:		ж
		25.419	CR	123	≋rev	2	Ф	Current version.	4.8.0	-
For H	ELP on u	sing this fo	rm, see	bottom of thi	is page or l	look a	at th	e pop-up text over	r the % syr	nbols.
		J			, 0				•	
Dranasa	d abanas	offooto.	LUCC 6:	n n a 90	NAC	Doo	J: _ ^	aaaaa Natuusiis V	Coro No	thus wit V
Propose	d change	arrects:	UICC a	pps#	ME	Rac	IIO A	ccess Network X	Core Ne	etwork X
Title:	ж	Correction	n of Nu	mber of Broa	adcast to b	e Re	porte	ed		

Source:		RAN3		
Work item code	e:₩	I E14	Date: #	25/08/2003
Category:	æ	F	Release: %	Rel-4
		Use <u>one</u> of the following categories:	Use <u>one</u> of	the following releases:
		F (correction)	2	(GSM Phase 2)
		A (corresponds to a correction in an earlier releas	e) R96	(Release 1996)
		B (addition of feature),	R97	(Release 1997)
		C (functional modification of feature)	R98	(Release 1998)
		D (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		be found in 3GPP TR 21.900.	Rel-5	(Release 5)
			Rel-6	(Release 6)

Reason for change: 第	The identified broadcast message has been confused when introducing reports functions within Kill and Write-Replace procedures. The correct identification of broadcast message must be restored. For the Kill and Write functions, the broadcast message to kill and replace has already been clarified as the CBS message. For the report function, what must be reported is the version of the CBS message identified in the request by the combination of message identifier and old serial number.
Summary of change: #	The scope of the 'number of broadcast completed' information is defined within the procedures Kill, Write-Replace and Status Query.
	Impact assessment towards the previous version of the specification (same release):
	This CR has isolated impact towards the previous version of the specification (same release).
	This CR has an impact under functional and protocol point of view.
	The impact can be considered isolated because it only affects the Kill, Write-Replace and Status Query functions.
Consequences if #	CBC misinterpret the number of broadcast completed information and draws bad

not approved:	conclusions and statistics.						
Clauses affected:	8 8.2.2, 8.3.2, 8.5.2, 8.5.3						
	YN						
Other specs	# X Other core specifications # TS 25.419 REL-5 CR124rev2						
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:

- 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.

8.2.2 Successful Operation

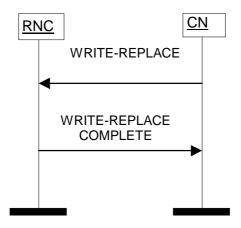


Figure 1: Write-Replace Procedure: Successful Operation

The CN shall initiate the procedure by sending a WRITE-REPLACE message to the RNC.

The presence of a *New Serial Number* IE will indicate that this is a new broadcast. The presence of both the *Old Serial Number* IE and a *New Serial Number* IE will indicate that this message is a replacement of an existing broadcast.

The RNC will initiate broadcasting of a new message or replace a message already broadcast as requested to the service areas as indicated in the *Service Areas List* IE.

The RNC shall uniquely identify the CBS message by the *Message Identifier* IE together with the twelve leftmost bits of the serial number in the *New Serial Number* IE and the *Service Area Identifier* IE.

The RNC shall perform the broadcast according to the value of the Category IE as follows:

- The Category IE, if given in the WRITE-REPLACE message, shall be treated as follows:
 - 1. If the value of *Category* IE is indicated as "High Priority", the RNC shall perform the broadcast immediately;
 - 2. If the value of *Category* IE is indicated as "Background", the RNC shall perform the broadcast when no other broadcast message indicated as "High Priority" or "Normal";
 - 3. If the value of *Category* IE is indicated as "Normal", the RNC shall perform the broadcast according to the *Repetition Period* IE.
- If the *Category* IE is not given in the WRITE-REPLACE message, the RNC shall perform the broadcast as the same category indicated as "Normal".

The RNC shall pass the *Data Coding Scheme* IE transparently to the radio interface protocol.

The RNC shall pass the Broadcast Message Content IE Transparently to the radio interface protocol.

The RNC shall broadcast the message frequently according to the value of the *Number of Broadcasts Requested IE*. If the value is set to "0", the RNC shall broadcast the message until the CN requests otherwise.

Upon receipt of the WRITE-REPLACE message the RNC shall respond using the WRITE-REPLACE COMPLETE message containing a *New Serial Number* IE indicating that resources are available as requested for the Service Area(s) specified and a *Number of Broadcasts Completed List* IE to indicate the number of times the <u>version of the old CBS message identified by the *Message Identifier* IE and the *Old Serial Number* IE, <u>old broadcast message</u> has been successfully broadcast to the particular Service Area(s). If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.</u>

If the WRITE-REPLACE message sent from the CN:

- contained a *New Serial Number* IE but not an *Old Serial Number* IE, the *Number of Broadcasts* IE within the *Number of Broadcasts Completed List* IE is set to "0" for each included Service Area in the corresponding WRITE-REPLACE COMPLETE message.
- contained both the *New Serial Number* IE and the *Old Serial Number* IE, an entry is made in the *Number of Broadcasts* IE in the *Number of Broadcasts Completed List* IE for each included Service Area in the corresponding WRITE-REPLACE COMPLETE message.

8.3.2 Successful Operation

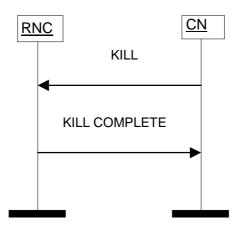


Figure 3: Kill Procedure: Successful Operation

The CN shall initiate the procedure by sending a KILL message to the RNC.

Upon receipt of the KILL message the RNC shall stop broadcasting the CBS message, which is indicated in the *Message Identifier* IE and the twelve leftmost bits of the *Old Serial Number* IE, in the indicated Service Area(s) as indicated in the *Service Areas List* IE.

The RNC shall respond using the KILL COMPLETE message, containing the *Old Serial Number* IE copied from the request and the *Number of Broadcast Completed List* IE when all Service Areas successfully stopped the broadcast. It shall indicate in the *Number of Broadcast Completed List* IE for each of these Service Area(s), the number of times the version of the CBS message identified by the *Message Identifier* IE and the *Old Serial Number* IE received has been sent to this particular Service Area(s) for broadcast. If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.

8.5.2 Successful Operation

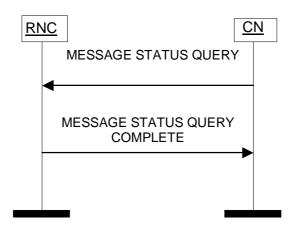


Figure 7: Message Status Query Procedure: Successful Operation

The CN shall initiate the procedure by sending a MESSAGE STATUS QUERY message to the RNC. The message shall contain the *Old Serial Number* IE along with the *Service Areas List* IE containing the Service Area Identifiers the status query is intended for. The status is requested for the version of the CBS message identified by the *Message Identifier* IE and the value of the *Old Version Number* IE.

Upon receipt of the MESSAGE STATUS QUERY message the RNC shall respond using the MESSAGE STATUS QUERY COMPLETE message.

Within this message the *Number of Broadcasts Completed List* IE contains each Service Area which successfully performed the requested operation and for each of these Service Area(s), the number of times the version of this CBS broadcast message has been sent to this particular Service Area(s) for broadcast. If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.

8.5.3 Unsuccessful Operation

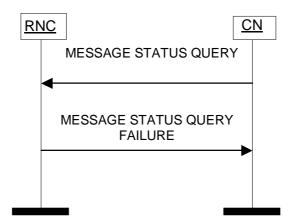


Figure 8: Message Status Query Procedure: Un-Successful Operation

If the requested operation fails (e.g. because the <u>CBS</u> Message Identifier is unknown, or when the RNC cannot send the status for a known <u>CBS message Message Identifier</u>) the RNC shall send a MESSAGE STATUS QUERY FAILURE message to the CN containing a *Failure List* IE for Service Area(s) for which the requested operation failed.

The MESSAGE STATUS QUERY FAILURE message may – if applicable - also include the *Number of Broadcasts Completed List* IE indicating those Service Area(s) for which the MESSAGE STATUS QUERY message was successful.

3GPP TSG-RAN3 Meeting #37 Budapest, Hungary, 25th-29th August 2003

Tdoc #R3-031250

	CI	HANG	E REQ	UE	ST	7		CR-Form-v7
*	25.419 CR	124	≋rev	2	æ	Current version:	5.4.0	æ

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the **%** symbols.

Proposed change affects: UICC apps₩ Radio Access Network X Core Network X Title: Correction of Number of Broadcast Reported Source: **# RAN3** Date: # 25/08/2003 Category: ж Release: # Rel-5 Use one of the following categories: Use one of the following releases: F (correction) (GSM Phase 2) 2 **A** (corresponds to a correction in an earlier release) R96 (Release 1996) **B** (addition of feature), R97 (Release 1997)

R98

R99

Rel-4

Rel-5

Rel-6

(Release 1998)

(Release 1999)

(Release 4)

(Release 5)

(Release 6)

C (functional modification of feature)

Detailed explanations of the above categories can

D (editorial modification)

be found in 3GPP TR 21.900.

Reason for change: * The identified broadcast message has been confused when introducing reports functions within Kill and Write-Replace procedures. The correct identification of broadcast message must be restored. For the Kill and Write functions, the broadcast message has already been clarified as the CBS message. For the report function, what must be reported is the version of the CBS message identified in the request by the combination of message identifier and old serial number. Summary of change: % The scope of the 'number of broadcast completed' information is defined within the procedures Kill, Write-Replace and Status Query. Impact assessment towards the previous version of the specification (same release): This CR has isolated impact towards the previous version of the specification (same release). This CR has an impact under functional and protocol point of view. The impact can be considered isolated because it only affects the Kill, Write-Replace and Status Query functions. Consequences if **CBC** misinterpret the number of broadcast completed information and draws bad

not approved:	conclusions and statistics.
Clauses affected:	% 8.2.2, 8.3.2, 8.5.2, 8.5.3
	YN
Other specs	# X Other core specifications # TS 25.419 REL-4 CR123rev2
affected:	X Test specifications 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 \$\mathbb{X}\$ 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.

8.2.2 Successful Operation

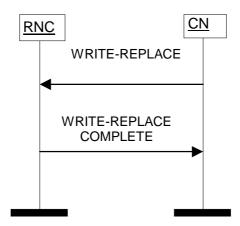


Figure 1: Write-Replace Procedure: Successful Operation

The CN shall initiate the procedure by sending a WRITE-REPLACE message to the RNC.

The presence of a *New Serial Number* IE will indicate that this is a new broadcast. The presence of both the *Old Serial Number* IE and a *New Serial Number* IE will indicate that this message is a replacement of an existing broadcast.

The RNC will initiate broadcasting of a new message or replace a message already broadcast as requested to the service areas as indicated in the *Service Areas List* IE.

The RNC shall uniquely identify the CBS message by the *Message Identifier* IE together with the twelve leftmost bits of the serial number in the *New Serial Number* IE and the *Service Area Identifier* IE.

The RNC shall perform the broadcast according to the value of the Category IE as follows:

- The Category IE, if given in the WRITE-REPLACE message, shall be treated as follows:
 - 1. If the value of *Category* IE is indicated as "High Priority", the RNC shall perform the broadcast immediately;
 - 2. If the value of *Category* IE is indicated as "Background", the RNC shall perform the broadcast when no other broadcast message indicated as "High Priority" or "Normal";
 - 3. If the value of *Category* IE is indicated as "Normal", the RNC shall perform the broadcast according to the *Repetition Period* IE.
- If the *Category* IE is not given in the WRITE-REPLACE message, the RNC shall perform the broadcast as the same category indicated as "Normal".

The RNC shall pass the *Data Coding Scheme* IE transparently to the radio interface protocol.

The RNC shall pass the Broadcast Message Content IE Transparently to the radio interface protocol.

The RNC shall broadcast the message frequently according to the value of the *Number of Broadcasts Requested IE*. If the value is set to "0", the RNC shall broadcast the message until the CN requests otherwise.

Upon receipt of the WRITE-REPLACE message the RNC shall respond using the WRITE-REPLACE COMPLETE message containing a *New Serial Number* IE indicating that resources are available as requested for the Service Area(s) specified and a *Number of Broadcasts Completed List* IE to indicate the number of times the <u>version of the old CBS message identified by the *Message Identifier* IE and the *Old Serial Number* IE, <u>old broadcast message</u> has been successfully broadcast to the particular Service Area(s). If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.</u>

If the WRITE-REPLACE message sent from the CN:

- contained a *New Serial Number* IE but not an *Old Serial Number* IE, the *Number of Broadcasts* IE within the *Number of Broadcasts Completed List* IE is set to "0" for each included Service Area in the corresponding WRITE-REPLACE COMPLETE message.
- contained both the *New Serial Number* IE and the *Old Serial Number* IE, an entry is made in the *Number of Broadcasts* IE in the *Number of Broadcasts Completed List* IE for each included Service Area in the corresponding WRITE-REPLACE COMPLETE message.

8.3.2 Successful Operation

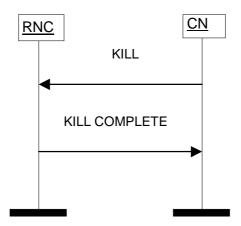


Figure 3: Kill Procedure: Successful Operation

The CN shall initiate the procedure by sending a KILL message to the RNC.

Upon receipt of the KILL message the RNC shall stop broadcasting the CBS message, which is indicated in the *Message Identifier* IE and the twelve leftmost bits of the *Old Serial Number* IE, in the indicated Service Area(s) as indicated in the *Service Areas List* IE.

The RNC shall respond using the KILL COMPLETE message, containing the *Old Serial Number* IE copied from the request and the *Number of Broadcast Completed List* IE when all Service Areas successfully stopped the broadcast. It shall indicate in the *Number of Broadcast Completed List* IE for each of these Service Area(s), the number of times the version of the CBS message-identified by the *Message Identifier* IE and the *Old Serial Number* IE received has been sent to this particular Service Area(s) for broadcast. If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.

8.5.2 Successful Operation

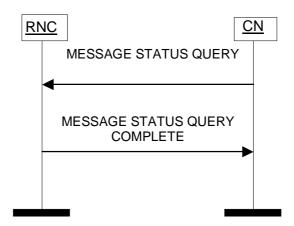


Figure 7: Message Status Query Procedure: Successful Operation

The CN shall initiate the procedure by sending a MESSAGE STATUS QUERY message to the RNC. The message shall contain the *Old Serial Number* IE along with the *Service Areas List* IE containing the Service Area Identifiers the status query is intended for. The status is requested for the version of the CBS message identified by the *Message Identifier* IE and the full value of the *Old Version Number* IE.

Upon receipt of the MESSAGE STATUS QUERY message the RNC shall respond using the MESSAGE STATUS QUERY COMPLETE message.

Within this message the *Number of Broadcasts Completed List* IE contains each Service Area which successfully performed the requested operation and for each of these Service Area(s), the number of times the version of this CBS broadcast message has been sent to this particular Service Area(s) for broadcast. If the version corresponding to the *Old Serial Number* IE value is not recognized for a particular service area, the number of broadcast completed shall be reported as '0' and the *Number of Broadcasts Compl Info* IE set to 'unknown'.

8.5.3 Unsuccessful Operation

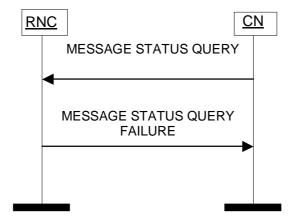


Figure 8: Message Status Query Procedure: Un-Successful Operation

If the requested operation fails (e.g. because the <u>CBS message Message Identifier</u> is unknown, or when the RNC cannot send the status for a known <u>CBS message Message Identifier</u>) the RNC shall send a MESSAGE STATUS

QUERY FAILURE message to the CN containing a *Failure List* IE for Service Area(s) for which the requested operation failed.

The MESSAGE STATUS QUERY FAILURE message may – if applicable - also include the *Number of Broadcasts Completed List* IE indicating those Service Area(s) for which the MESSAGE STATUS QUERY message was successful.