

TSG-RAN Meeting #23
Phoenix, 10-12 March 2004

RP-040131

Title: CRs on 25.331 (Rel-5 onwards). Updates.

Source: TSG-RAN

Agenda item: 7.3.5

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Was in doc	Workitem
25.331	2216	3	Rel-5	Connected mode handling IE 'CN domain system information' in SIB1	F	5.7.1	5.8.0	RP-040107	TEI5
25.331	2217	3	Rel-6	Connected mode handling IE 'CN domain system information' in SIB1	A	6.0.1	6.1.0	RP-040107	TEI5
25.331	2266	2	Rel-5	Modification of Inter-frequency CELL_INFO_LIST	F	5.7.1	5.8.0	RP-040108	TEI5
25.331	2267	2	Rel-6	Modification of Inter-frequency CELL_INFO_LIST	A	6.0.1	6.1.0	RP-040108	TEI5
25.331	2268	1	Rel-5	[VAS] 1B-1C conflicts when 1A is not configured	F	5.7.1	5.8.0	RP-040108	TEI5
25.331	2269	1	Rel-6	[VAS] 1B-1C conflicts when 1A is not configured	A	6.0.1	6.1.0	RP-040108	TEI5
25.331	2270	1	Rel-5	Handling of wait time in RRC connection reject	F	5.7.1	5.8.0	RP-040108	TEI5
25.331	2271	1	Rel-6	Handling of wait time in RRC connection reject	A	6.0.1	6.1.0	RP-040108	TEI5

CHANGE REQUEST

⌘ **25.331 CR 2216** ⌘ rev **3** ⌘ Current version: **5.7.1** ⌘

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:	⌘ Connected mode handling IE 'CN domain system information' in SIB1		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 18/12/2003
Category:	⌘ F	Release:	⌘ Rel-5
	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 release)		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 be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

1/ Section 8.1.1.6.1 describes the handling of core network information received in SIB1 for idle mode and connected mode. In both idle mode and connected mode the UE AS is required to use the information to check the suitability of the cell (i.e. to check that the cell does not belong to a forbidden LA). In idle mode the UE AS is required to forward the information to NAS for the purpose of triggering LAU or RAU procedures.

However, the current text requires that in both idle mode and connected mode the UE AS is required to inform the NAS about the absence of CN information for a particular CN domain. In the absence of CN information the NAS will not initiate any signalling towards that domain.

It is inconsistent that the UE AS only informs that NAS about the presence of CN information for a domain only when in idle mode, but informs the NAS about the absence of CN information when in idle mode and connected mode.

If a UE is camped on a cell under a DRNC which has temporarily lost its connection to an MSC or SGSN then SIB1 of the cell would not contain the CN information for that domain. The current text would require that the UE informs the NAS and this would mean that signalling and calls using that domain could not be initiated. However, the UEs SRNC may still have a connection to both MSC and SGSN and so signalling and calls on both domains would actually be possible for that UE.

	<p>Changes in revision 1:</p> <p>2/ Section 10.3.1.9 includes a reference to [17] for the semantics of the IE "GSM-MAP NAS system information". However this IE is not described in [17] and the coding does not even comply to the general IE rules as specified in [17]. Instead, a detailed description of the IEs can be found in 24.008 [5] section 10.5.1.12 and subsections.</p>
Summary of change: ⌘	<p>1/ Section 8.1.1.6.1 is changed so that the UE is required to inform the NAS about the absence of CN domain system information only when in idle mode.</p> <p>2/ It is proposed to update the concerning reference.</p> <p>Isolated Impact Analysis Functionality corrected: Connected mode handling of CN domain system information in SIB.</p> <p>Isolated impact statement: Correction to a function where specification was incorrect. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.</p> <p>If a UE does is not implemented according to this change then in the situation that they are camped on a cell under a DRNC that has lost its connection to an MSC or SGSN, then the UE will be denied access to services of that CD domain even though those services could be provided by the UEs SRNC.</p>
Consequences if not approved: ⌘	<p>1/ If the change is not approved and if a UE is camped on a cell under a DRNC that has lost its connection to an MSC or SGSN, then the UE will be denied access to services of that CD domain even though those services could be provided by the UEs SRNC.</p> <p>2/ The specification will continue to incorrectly refer to [17].</p>

Clauses affected: ⌘	8.1.1.6.1, 10.3.1.9										
Other specs affected: ⌘	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications Test specifications O&M Specifications	⌘
Y	N										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
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.

8.1.1.6.1 System Information Block type 1

The UE should store all relevant IEs included in this system information block if the "PLMN Type" in the variable SELECTED_PLMN has the value "GSM-MAP" and the IE "PLMN type" in the Master Information Block has the value "GSM-MAP" or "GSM-MAP and ANSI-41". The UE shall also:

- 1> check that the cell, according to information included in IE "CN common GSM-MAP NAS system information", is suitable [4];
- 1> if in connected mode:
 - 2> not forward the content of the IE "CN common GSM-MAP NAS system information" to upper layers.
- 1> if in idle mode:
 - 2> forward the content of the IE "CN common GSM-MAP NAS system information" to upper layers.
- 1> for the IE "CN domain system information list":
 - 2> for each IE "CN domain system information" that is present:
 - 3> check that the cell, according to information included in IE "CN domain specific NAS system information", is suitable [4];
 - 3> if in connected mode:
 - 4> not forward the content of the IE "CN domain specific NAS system information" to upper layers.
 - 3> if in idle mode:
 - 4> forward the content of the IE "CN domain specific NAS system information" and the IE "CN domain identity" to upper layers;
 - 4> use the IE "CN domain specific DRX cycle length coefficient" to calculate frame number for the Paging Occasions as specified in [4];
 - 4> store the value of the IE "CN domain specific DRX cycle length coefficient" for use in connected mode.
 - 2> if an IE "CN domain system information" is not present for a particular CN domain:
 - [3> if in idle mode:](#)
 - ~~3~~4> indicate to upper layers that no CN system information is available for that CN domain.
 - 1> if the UE has not yet entered UTRA RRC connected mode:
 - 2> store the values of the IE "UE Timers and constants in connected mode" in the variable TIMERS_AND_CONSTANTS.
 - 1> use the values stored in the variable TIMERS_AND_CONSTANTS for the relevant timers and constants.

10.3.1.9 NAS system information (GSM-MAP)

This information element contains system information that belongs to the non-access stratum for a GSM-MAP type of PLMN. This information is transparent to RRC. It may contain either information specific to one CN domain (CS or PS) or information common for both CN domains.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
GSM-MAP NAS system information	MP		Octet string(1..8)	The first octet contains octet 1 [547] of the NAS system information element, the second octet contains octet 2 of the NAS system information element and so on.

CHANGE REQUEST

⌘ **25.331 CR 2217** ⌘ rev **3** ⌘ Current version: **6.0.1** ⌘

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:	⌘ Connected mode handling IE 'CN domain system information' in SIB1		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 18/12/2003
Category:	⌘ A	Release:	⌘ Rel-6
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 release)		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 be found in 3GPP TR 21.900 .		Rel-4 (Release 4)	
		Rel-5 (Release 5)	
		Rel-6 (Release 6)	

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

1/ Section 8.1.1.6.1 describes the handling of core network information received in SIB1 for idle mode and connected mode. In both idle mode and connected mode the UE AS is required to use the information to check the suitability of the cell (i.e. to check that the cell does not belong to a forbidden LA). In idle mode the UE AS is required to forward the information to NAS for the purpose of triggering LAU or RAU procedures.

However, the current text requires that in both idle mode and connected mode the UE AS is required to inform the NAS about the absence of CN information for a particular CN domain. In the absence of CN information the NAS will not initiate any signalling towards that domain.

It is inconsistent that the UE AS only informs that NAS about the presence of CN information for a domain only when in idle mode, but informs the NAS about the absence of CN information when in idle mode and connected mode.

If a UE is camped on a cell under a DRNC which has temporarily lost its connection to an MSC or SGSN then SIB1 of the cell would not contain the CN information for that domain. The current text would require that the UE informs the NAS and this would mean that signalling and calls using that domain could not be initiated. However, the UEs SRNC may still have a connection to both MSC and SGSN and so signalling and calls on both domains would actually be possible for that UE.

	<p>Changes in revision 1:</p> <p>2/ Section 10.3.1.9 includes a reference to [17] for the semantics of the IE "GSM-MAP NAS system information". However this IE is not described in [17] and the coding does not even comply to the general IE rules as specified in [17]. Instead, a detailed description of the IEs can be found in 24.008 [5] section 10.5.1.12 and subsections.</p>
Summary of change: ⌘	<p>1/ Section 8.1.1.6.1 is changed so that the UE is required to inform the NAS about the absence of CN domain system information only when in idle mode.</p> <p>2/ It is proposed to update the concerning reference.</p> <p>Isolated Impact Analysis Functionality corrected: Connected mode handling of CN domain system information in SIB.</p> <p>Isolated impact statement: Correction to a function where specification was incorrect. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.</p> <p>If a UE does is not implemented according to this change then in the situation that they are camped on a cell under a DRNC that has lost its connection to an MSC or SGSN, then the UE will be denied access to services of that CD domain even though those services could be provided by the UEs SRNC.</p>
Consequences if not approved: ⌘	<p>1/ If the change is not approved and if a UE is camped on a cell under a DRNC that has lost its connection to an MSC or SGSN, then the UE will be denied access to services of that CD domain even though those services could be provided by the UEs SRNC.</p> <p>2/ The specification will continue to incorrectly refer to [17].</p>

Clauses affected: ⌘	8.1.1.6.1, 10.3.1.9										
Other specs affected:	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications Test specifications O&M Specifications	⌘
Y	N										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
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.

8.1.1.6.1 System Information Block type 1

The UE should store all relevant IEs included in this system information block if the "PLMN Type" in the variable SELECTED_PLMN has the value "GSM-MAP" and the IE "PLMN type" in the Master Information Block has the value "GSM-MAP" or "GSM-MAP and ANSI-41". The UE shall also:

- 1> check that the cell, according to information included in IE "CN common GSM-MAP NAS system information", is suitable [4];
- 1> if in connected mode:
 - 2> not forward the content of the IE "CN common GSM-MAP NAS system information" to upper layers.
- 1> if in idle mode:
 - 2> forward the content of the IE "CN common GSM-MAP NAS system information" to upper layers.
- 1> for the IE "CN domain system information list":
 - 2> for each IE "CN domain system information" that is present:
 - 3> check that the cell, according to information included in IE "CN domain specific NAS system information", is suitable [4];
 - 3> if in connected mode:
 - 4> not forward the content of the IE "CN domain specific NAS system information" to upper layers.
 - 3> if in idle mode:
 - 4> forward the content of the IE "CN domain specific NAS system information" and the IE "CN domain identity" to upper layers;
 - 4> use the IE "CN domain specific DRX cycle length coefficient" to calculate frame number for the Paging Occasions as specified in [4];
 - 4> store the value of the IE "CN domain specific DRX cycle length coefficient" for use in connected mode.
 - 2> if an IE "CN domain system information" is not present for a particular CN domain:
 - [3> if in idle mode:](#)
 - ~~34~~> indicate to upper layers that no CN system information is available for that CN domain.
 - 1> if the UE has not yet entered UTRA RRC connected mode:
 - 2> store the values of the IE "UE Timers and constants in connected mode" in the variable TIMERS_AND_CONSTANTS.
 - 1> use the values stored in the variable TIMERS_AND_CONSTANTS for the relevant timers and constants.

10.3.1.9 NAS system information (GSM-MAP)

This information element contains system information that belongs to the non-access stratum for a GSM-MAP type of PLMN. This information is transparent to RRC. It may contain either information specific to one CN domain (CS or PS) or information common for both CN domains.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
GSM-MAP NAS system information	MP		Octet string(1..8)	The first octet contains octet 1 [547] of the NAS system information element, the second octet contains octet 2 of the NAS system information element and so on.

TSG-RAN meeting #23
Phoenix, 10-12 March 2004

RP-040131

CR-Form-v7

CHANGE REQUEST

⌘ 25.331 CR 2266 ⌘ rev 2 ⌘ Current version: 5.7.1 ⌘

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:	⌘ Modification of Inter-frequency CELL_INFO_LIST
Source:	⌘ TSG RAN
Work item code:	⌘ TEI5
Date:	⌘ Febr 2004
Category:	⌘ F
	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 .
Release:	⌘ Rel-5
	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)
	Rel-6 (Release 6)

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

1. According to an informative note in 25.331, section 8.4.1.3, UTRAN may act as follows for modifying the Inter-frequency Cell Info List:

NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, the only possibility is to set the IE "report criteria" to "intra-frequency report criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".

The specification does however not require that UE leaves the stored Intra-frequency event list unchanged if IE "Parameters required for each event" is not included.

Earlier in section 8.4.1.3, this UE behaviour is specified for the case the Intra-frequency event list is not included when modifying Intra-frequency measurement (e.g. the intra-frequency cell info list).

In case this change is not agreed, the note in section 8.4.1.3 need to be modified instead.

2. In section 8.4.1.3 and 8.6.7.14, incorrect IE names exist for Intra- and Inter-

	<p>frequency measurements IEs.</p> <p>3. In second part section 14.11.1, Initial virtual active set, UE behaviour is specified for the case UTRAN does not configure specific 1x events for the handling of virtual active set. However, in the text referring to the IE "Parameters required for each event", it is not clear if the Intra- or Inter-frequency event list is targeted.</p>
Summary of change: ⌘	<p>1. It has been added that UE shall leave the stored Intra-frequency event list unchanged in the intra-frequency event list is not included in the message.</p> <p>2. Indicated errors have been corrected.</p> <p>3. It has been clarified that the IE "Parameters for each event" contains the intra-frequency event list. Also, the corresponding If-statement in the first part of the section has been change.</p> <p>T1 impact: No impact Backward compatibility: Considered a clarification of currently specified UE behaviour. This correction will affect a UE implementation that has not already implemented the CR.</p>
Consequences if not approved: ⌘	<p>1. At modification of Inter-frequency CELLINFOLIST, the MEASUREMENT CONTROL message would need to contain the complete Intra-freq event list.</p> <p>2. The indicated unclarities/incorrections will remain in the specification.</p> <p>3. The indicated unclarities/incorrections will remain in the specification.</p>

Clauses affected: ⌘	8.4.1.3, 8.6.7.14, 14.11.1									
Other specs affected:	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	Y	N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Other core specifications ⌘</p> <p>Test specifications</p> <p>O&M Specifications</p>
Y	N									
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
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.

8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS_IDENTITY; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
 - 4> if the measurement is valid in the current RRC state of the UE:
 - 5> begin measurements according to the stored control information for this measurement identity.

NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.

- 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.
- 2> for measurement type "UE positioning measurement":
 - 3> if the UE is in CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "OTDOA":
 - 5> if IE "Method Type" is set to "UE assisted":
 - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
 - 7> if System Information Block type 15.4 is broadcast:
 - 8> read System Information Block type 15.4.
 - 7> act as specified in subclause 8.6.7.19.2.
 - 5> if IE "Method Type" is set to "UE based":
 - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
 - 7> if System Information Block type 15.5 is broadcast:
 - 8> read System Information Block type 15.5.

- 7> act as specified in subclause 8.6.7.19.2a.
- 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.
- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL_FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", "Inter-RAT reporting quantity" and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS ionospheric model", "UE positioning GPS UTC model", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that is present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:

- 5> replace all instances of the IEs listed above (and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IEs received in the MEASUREMENT CONTROL message;
 - 5> leave all other stored information elements unchanged in the variable MEASUREMENT_IDENTITY.
 - 3> otherwise:
 - 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if measurement type is set to "inter-frequency measurement":
 - 3> if "report criteria" is set to "intra-frequency [measurement reporting](#) criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":
 - 4> [if IE "Parameters required for each event" is included:](#)
 - 45> leave the currently stored "inter-frequency [measurement reporting](#) criteria" within "report riteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency [measurement reporting](#) criteria" and "[intra-frequency reporting criteria](#)". [\[Changed indentation\]](#)
 - 4> [otherwise:](#)
 - 5> [leave the currently stored "inter-frequency measurement reporting criteria" and "intra-frequency measurement reporting criteria" within "report riteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency reporting criteria"](#).
 - 3> otherwise:
 - 4> clear the variables associated with the CHOICE "report criteria" and store the received "report criteria" choice;
 - 4> if the IE "inter-frequency measurement quantity" is present:
 - 5> clear the variables associated with the choice "reporting criteria" in "inter-frequency measurement quantity" and store the received "reporting criteria" choice.
- NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, the only possibility is to set the IE "report criteria" to "intra-frequency [measurement reporting](#) criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".
- 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS_IDENTITY; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode, on at least one supported band of that measurement type, to perform the measurements:
 - 4> resume the measurements according to the new stored measurement control information.
 - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
 - 3> if the measurement is valid in the current RRC state of the UE:

- 4> resume measurements according to the new stored control information for this measurement identity.
 - 2> for any other measurement type:
 - 3> resume the measurements according to the new stored measurement control information.
 - 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.
 - 1> if the IE "DPCH Compressed Mode Status Info" is present:
 - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IE 'TGMP' in variable TGPS_IDENTITY):
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if there is any pending "TGPS reconfiguration CFN" or any pending "TGCFN":
 - 3> the UE behaviour is unspecified;
 - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
 - 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
 - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS_IDENTITY to "active"; and
 - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - 4> start the concerned pattern sequence immediately at that CFN.
 - 2> not alter pattern sequences stored in variable TGPS_IDENTITY, if the pattern sequence is not identified in IE "TGPSI" in the received message.
- 1> if the UE in CELL_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT_IDENTITY:
 - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT_IDENTITY; and

- 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE_CAPABILITY_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

The UE may:

- 1> if the IE "Measurement command" has the value "setup":
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "GPS":
 - 5> if IE "UE positioning GPS assistance data" is not included and variable UE_POSITIONING_GPS_DATA is empty:
 - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
 - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
 - 6> act as specified in subclause 8.6.7.19.3.
- 1> and the procedure ends.

8.6.7.14 Inter-frequency measurement

If the Inter-frequency cell info list, included in the variable CELL_INFO_LIST, includes a number (M) of frequencies that is larger than the number (N) considered in a UE performance requirement defined in [19] and [20]:

- 1> the UE shall:
 - 2> meet this performance requirement on the first relevant (N) frequencies, according to the order defined by the position of the frequencies in the Inter-frequency cell info list, included in the variable CELL_INFO_LIST.
- 1> the UE may:
 - 2> ignore the remaining (M-N) frequencies.

If IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message, where IE "measurement command" has the value "setup", but IE "Inter-frequency measurement quantity", IE "Inter-frequency reporting quantity" or IE "parameters required for each event" (given "CHOICE Report criteria" is set to "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") is not received, the UE shall:

- 1> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY;
- 1> set the variable CONFIGURATION_INCOMPLETE to TRUE.;

In the case of an inter-frequency measurement for FDD, the UE shall:

- 1> if IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message, where IE "measurement command" has the value "setup", if an inter-frequency event is configured that is different from event 2d or 2f, and if the IE "Inter-frequency SET UPDATE" is not received in that same message:
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> if the IE "Inter-frequency SET UPDATE" is received:
 - 2> if the value of the IE "UE autonomous update mode" set to "Off" or "On":
 - 3> if more than one frequency is included in the list of cells pointed at in the IE "cells for measurement" if also included in the same IE "Inter-frequency measurement", or otherwise included in the "Inter-frequency cell info" part of the variable CELL_INFO_LIST:
 - 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.

If IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message:

- 1> if "~~CHOICE~~ "Report criteria" is set to "inter-frequency [measurement](#) reporting criteria" and [CHOICE "reporting criteria" in](#) "inter-frequency measurement quantity" is not set to "inter-frequency reporting criteria"; or
- 1> if "~~CHOICE~~ "Report criteria" is set to "intra-frequency [measurement](#) reporting criteria" and [CHOICE "reporting criteria" in](#) "inter-frequency measurement quantity" is not set to "intra-frequency reporting criteria":
 - 2> the UE behaviour is not specified.

If the variable CONFIGURATION_INCOMPLETE is set to TRUE, the UE shall:

- 1> act as described in subclause 8.4.1.4a.

14.11.1 Initial virtual active set

If the UE receives a MEASUREMENT CONTROL message that sets up or modifies an inter-frequency measurement and includes the IE "Inter-frequency set update", the UE shall:

1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" is included in the MEASUREMENT CONTROL message; or

1> if the IE "Intra-Frequency measurement reporting criteria" ~~and the~~ including IE "Parameters required for each event" are stored for this measurement in the variable MEASUREMENT_IDENTITY;

2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

3> for each non-used frequency F_i considered in the measurement:

4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 , the greatest downlink RSCP after despreading, or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

5> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

$$N_i = \min(N_{Ia}, N_{Cells\ F_i}) \text{ if } N_{Ia} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{Ia} is the "Reporting deactivation threshold" included in the "Intra-Frequency measurement" IE received for that inter-frequency measurement for event 1a.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

2> if the IE "UE autonomous update mode" is set to "on":

3> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

4> send a MEASUREMENT REPORT with IEs set as follows:

5> set the Measurement identity to the identity of the inter-frequency measurement;

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in a virtual active set of the non-used frequency considered in the inter-frequency measurement;

5> do not include the IEs "measured results" or "additional measured results".

2> if the IE "UE autonomous update mode" is set to "Off":

3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":

4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.

3> otherwise:

- 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement; and
 - 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.
- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" were not included in the MEASUREMENT CONTROL message; and
- 1> the IE "Intra-Frequency measurement reporting criteria" ~~and the~~ including IE "Parameters required for each event" are not stored for this measurement in the variable MEASUREMENT_IDENTITY:
- 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
- 3> for each non-used frequency F_i considered in the measurement:

- 4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 or the greatest downlink RSCP after despreading or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

- 5> if event 1a is configured for the used frequency in an intra-frequency measurement:

$$N_i = \min(N_{1a}, N_{Cells\ F_i}) \text{ if } N_{1a} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{1a} is the "Reporting deactivation threshold" included in the intra-frequency measurement for the first event 1a defined in the intra-frequency measurement with the lowest identity.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

- 5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

- 3> if the IE "UE autonomous update mode" is set to "on":
- 4> if event 1a is configured for the used frequency in an intra-frequency measurement:
 - 5> send a measurement report with IEs set as follows:
 - 6> set the Measurement identity to the identity of the inter-frequency measurement;
 - 6> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in the initial virtual active set of the non-used frequency considered in that measurement;
 - 6> do not include the IEs "measured results" or "additional measured results".
- 2> if the IE "UE autonomous update mode" is set to "off":
- 3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":
 - 4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.
 - 3> otherwise:

- 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement; and
- 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.

TSG-RAN meeting #23
Phoenix, 10-12 March 2004

RP-040131

CR-Form-v7

CHANGE REQUEST

⌘ 25.331 CR 2267 ⌘ rev 2 ⌘ Current version: 6.0.1 ⌘

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:	⌘ Modification of Inter-frequency CELL_INFO_LIST
Source:	⌘ TSG RAN
Work item code:	⌘ TEI5
Date:	⌘ Febr 2004
Category:	⌘ A
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>
Release:	⌘ Rel-6
	<p>Use <u>one</u> of the following releases:</p> <p>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)</p>

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

1. According to an informative note in 25.331, section 8.4.1.3, UTRAN may act as follows for modifying the Inter-frequency Cell Info List:

NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, the only possibility is to set the IE "report criteria" to "intra-frequency report criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".

The specification does however not require that UE leaves the stored Intra-frequency event list unchanged if IE "Parameters required for each event" is not included.

Earlier in section 8.4.1.3, this UE behaviour is specified for the case the Intra-frequency event list is not included when modifying Intra-frequency measurement (e.g. the intra-frequency cell info list).

In case this change is not agreed, the note in section 8.4.1.3 need to be modified instead.

2. In section 8.4.1.3 and 8.6.7.14, incorrect IE names exist for Intra- and Inter-

	<p>frequency measurements IEs.</p> <p>3. In second part section 14.11.1, Initial virtual active set, UE behaviour is specified for the case UTRAN does not configure specific 1x events for the handling of virtual active set. However, in the text referring to the IE "Parameters required for each event", it is not clear if the Intra- or Inter-frequency event list is targeted.</p>
Summary of change: ⌘	<p>1. It has been added that UE shall leave the stored Intra-frequency event list unchanged in the intra-frequency event list is not included in the message.</p> <p>2. Indicated errors have been corrected.</p> <p>3. It has been clarified that the IE "Parameters required for each event" contains the intra-frequency event list. Also, the corresponding If-statement in the first part of the section has been change.</p> <p>T1 impact: No impact Backward compatibility: Considered a clarification of currently specified UE behaviour. This correction will affect a UE implementation that has not already implemented the CR.</p>
Consequences if not approved:	<p>⌘ 1. At modification of Inter-frequency CELLINFOLIST, the MEASUREMENT CONTROL message would need to contain the complete Intra-freq event list.</p> <p>2. The indicated unclarities/incorrections will remain in the specification.</p> <p>3. The indicated unclarities/incorrections will remain in the specification.</p>

Clauses affected:	⌘ 8.4.1.3, 8.6.7.14, 14.11.1																
Other specs affected:	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> <th></th> <th>⌘</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Other core specifications</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Test specifications</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>O&M Specifications</td> <td></td> </tr> </tbody> </table>	Y	N		⌘	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other core specifications		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Test specifications		<input checked="" type="checkbox"/>	<input type="checkbox"/>	O&M Specifications	
Y	N		⌘														
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other core specifications															
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Test specifications															
<input checked="" type="checkbox"/>	<input type="checkbox"/>	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.

8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS_IDENTITY; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
 - 4> if the measurement is valid in the current RRC state of the UE:
 - 5> begin measurements according to the stored control information for this measurement identity.

NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.

- 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.
- 2> for measurement type "UE positioning measurement":
 - 3> if the UE is in CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "OTDOA":
 - 5> if IE "Method Type" is set to "UE assisted":
 - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
 - 7> if System Information Block type 15.4 is broadcast:
 - 8> read System Information Block type 15.4.
 - 7> act as specified in subclause 8.6.7.19.2.
 - 5> if IE "Method Type" is set to "UE based":
 - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
 - 7> if System Information Block type 15.5 is broadcast:
 - 8> read System Information Block type 15.5.

- 7> act as specified in subclause 8.6.7.19.2a.
- 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.
- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL_FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", "Inter-RAT reporting quantity" and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS ionospheric model", "UE positioning GPS UTC model", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that is present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:

- 5> replace all instances of the IEs listed above (and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IEs received in the MEASUREMENT CONTROL message;
 - 5> leave all other stored information elements unchanged in the variable MEASUREMENT_IDENTITY.
- 3> otherwise:
- 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 2> if measurement type is set to "inter-frequency measurement":
- 3> if "report criteria" is set to "intra-frequency [measurement reporting](#) criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":
 - 4> [if IE "Parameters required for each event" is included:](#)
 - 45> leave the currently stored "inter-frequency [measurement reporting](#) criteria" within "report riteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency [measurement reporting](#) criteria" and "[intra-frequency reporting criteria](#)". [\[Changed indentation\]](#)
 - 4> [otherwise:](#)
 - 5> [leave the currently stored "inter-frequency measurement reporting criteria" and "intra-frequency measurement reporting criteria" within "report riteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency reporting criteria"](#).
 - 3> otherwise:
 - 4> clear the variables associated with the CHOICE "report criteria" and store the received "report criteria" choice;
 - 4> if the IE "inter-frequency measurement quantity" is present:
 - 5> clear the variables associated with the choice "reporting criteria" in "inter-frequency measurement quantity" and store the received "reporting criteria" choice.
- NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, the only possibility is to set the IE "report criteria" to "intra-frequency [measurement reporting](#) criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".
- 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS_IDENTITY; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode, on at least one supported band of that measurement type, to perform the measurements:
 - 4> resume the measurements according to the new stored measurement control information.
 - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
 - 3> if the measurement is valid in the current RRC state of the UE:

- 4> resume measurements according to the new stored control information for this measurement identity.
 - 2> for any other measurement type:
 - 3> resume the measurements according to the new stored measurement control information.
 - 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.
 - 1> if the IE "DPCH Compressed Mode Status Info" is present:
 - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IE 'TGMP' in variable TGPS_IDENTITY):
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if there is any pending "TGPS reconfiguration CFN" or any pending "TGCFN":
 - 3> the UE behaviour is unspecified;
 - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
 - 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
 - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS_IDENTITY to "active"; and
 - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - 4> start the concerned pattern sequence immediately at that CFN.
 - 2> not alter pattern sequences stored in variable TGPS_IDENTITY, if the pattern sequence is not identified in IE "TGPSI" in the received message.
- 1> if the UE in CELL_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT_IDENTITY:
 - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT_IDENTITY; and

- 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE_CAPABILITY_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

The UE may:

- 1> if the IE "Measurement command" has the value "setup":
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "GPS":
 - 5> if IE "UE positioning GPS assistance data" is not included and variable UE_POSITIONING_GPS_DATA is empty:
 - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
 - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
 - 6> act as specified in subclause 8.6.7.19.3.
- 1> and the procedure ends.

8.6.7.14 Inter-frequency measurement

If the Inter-frequency cell info list, included in the variable CELL_INFO_LIST, includes a number (M) of frequencies that is larger than the number (N) considered in a UE performance requirement defined in [19] and [20]:

- 1> the UE shall:
 - 2> meet this performance requirement on the first relevant (N) frequencies, according to the order defined by the position of the frequencies in the Inter-frequency cell info list, included in the variable CELL_INFO_LIST.
- 1> the UE may:
 - 2> ignore the remaining (M-N) frequencies.

If IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message, where IE "measurement command" has the value "setup", but IE "Inter-frequency measurement quantity", IE "Inter-frequency reporting quantity" or IE "parameters required for each event" (given "CHOICE Report criteria" is set to "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") is not received, the UE shall:

- 1> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY;
- 1> set the variable CONFIGURATION_INCOMPLETE to TRUE.;

In the case of an inter-frequency measurement for FDD, the UE shall:

- 1> if IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message, where IE "measurement command" has the value "setup", if an inter-frequency event is configured that is different from event 2d or 2f, and if the IE "Inter-frequency SET UPDATE" is not received in that same message:
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> if the IE "Inter-frequency SET UPDATE" is received:
 - 2> if the value of the IE "UE autonomous update mode" set to "Off" or "On":
 - 3> if more than one frequency is included in the list of cells pointed at in the IE "cells for measurement" if also included in the same IE "Inter-frequency measurement", or otherwise included in the "Inter-frequency cell info" part of the variable CELL_INFO_LIST:
 - 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.

If IE "Inter-frequency measurement" is received by the UE in a MEASUREMENT CONTROL message:

- 1> if ~~CHOICE "Report criteria"~~ is set to "inter-frequency [measurement reporting criteria](#)" and [CHOICE "reporting criteria" in "inter-frequency measurement quantity"](#) is not set to "inter-frequency reporting criteria"; or
- 1> if ~~CHOICE "Report criteria"~~ is set to "intra-frequency [measurement reporting criteria](#)" and [CHOICE "reporting criteria" in "inter-frequency measurement quantity"](#) is not set to "intra-frequency reporting criteria":
 - 2> the UE behaviour is not specified.

If the variable CONFIGURATION_INCOMPLETE is set to TRUE, the UE shall:

- 1> act as described in subclause 8.4.1.4a.

14.11.1 Initial virtual active set

If the UE receives a MEASUREMENT CONTROL message that sets up or modifies an inter-frequency measurement and includes the IE "Inter-frequency set update", the UE shall:

1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" is included in the MEASUREMENT CONTROL message; or

1> if the IE "Intra-Frequency measurement reporting criteria" ~~and the~~including IE "Parameters required for each event" are stored for this measurement in the variable MEASUREMENT_IDENTITY;

2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

3> for each non-used frequency F_i considered in the measurement:

4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 , the greatest downlink RSCP after despreading, or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

5> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

$$N_i = \min(N_{Ia}, N_{Cells\ F_i}) \text{ if } N_{Ia} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{Ia} is the "Reporting deactivation threshold" included in the "Intra-Frequency measurement" IE received for that inter-frequency measurement for event 1a.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

2> if the IE "UE autonomous update mode" is set to "on":

3> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

4> send a MEASUREMENT REPORT with IEs set as follows:

5> set the Measurement identity to the identity of the inter-frequency measurement;

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in a virtual active set of the non-used frequency considered in the inter-frequency measurement;

5> do not include the IEs "measured results" or "additional measured results".

2> if the IE "UE autonomous update mode" is set to "Off":

3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":

4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.

3> otherwise:

- 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement; and
- 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.

1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" were not included in the MEASUREMENT CONTROL message; and

1> the IE "Intra-Frequency measurement reporting criteria" ~~and the~~ including IE "Parameters required for each event" are not stored for this measurement in the variable MEASUREMENT_IDENTITY:

2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

3> for each non-used frequency F_i considered in the measurement:

4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 or the greatest downlink RSCP after despreading or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

5> if event 1a is configured for the used frequency in an intra-frequency measurement:

$$N_i = \min(N_{1a}, N_{Cells\ F_i}) \text{ if } N_{1a} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{1a} is the "Reporting deactivation threshold" included in the intra-frequency measurement for the first event 1a defined in the intra-frequency measurement with the lowest identity.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

3> if the IE "UE autonomous update mode" is set to "on":

4> if event 1a is configured for the used frequency in an intra-frequency measurement:

5> send a measurement report with IEs set as follows:

6> set the Measurement identity to the identity of the inter-frequency measurement;

6> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in the initial virtual active set of the non-used frequency considered in that measurement;

6> do not include the IEs "measured results" or "additional measured results".

2> if the IE "UE autonomous update mode" is set to "off":

3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":

4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.

3> otherwise:

- 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement; and
- 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.

CHANGE REQUEST

⌘ **25.331** **CR 2268** ⌘ rev **1** ⌘ Current version: **5.7.1** ⌘

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:	⌘ [VAS] 1B-1C conflicts when 1A is not configured		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 02/2004
Category:	⌘ F	Release:	⌘ Rel-5
	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 release)		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 be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘	<p>Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.</p> <p><u>Reason for change:</u></p> <p>In clause 14.11.2 there is a requirement to continuously update the VAS if event 1A is not configured ("if event 1a is not configured:[...]the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report"). This conflicts with the requirements set for event 1B, 1C set in the same section, since the current wording suggests that even without event 1A configured, events 1B, 1C could be triggered.</p>
Summary of change:	⌘	Separated the conditions of having 1A configured and triggered so that 1B and 1C are only available when 1A is configured.
Consequences if not approved:	⌘	Wording will still suggest that events 1B/1C can be triggered when even 1A is not configured and this will conflict with the requirement for the UE to update the VAS autonomously and not send any measurement report.

Clauses affected:	⌘	14.11.2								
Other specs affected:	⌘	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;"> </td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;"> </td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;"> </td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N						
Y	N									

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.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

14.11.1 Initial virtual active set

If the UE receives a MEASUREMENT CONTROL message that sets up or modifies an inter-frequency measurement and includes the IE "Inter-frequency set update", the UE shall:

- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" is included in the MEASUREMENT CONTROL message; or
- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" are stored for this measurement in the variable MEASUREMENT_IDENTITY:
- 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 3> for each non-used frequency F_i considered in the measurement:
 - 4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 , the greatest downlink RSCP after despreading, or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

5> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

$$N_i = \min(N_{1a}, N_{Cells\ F_i}) \text{ if } N_{1a} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{1a} is the "Reporting deactivation threshold" included in the "Intra-Frequency measurement" IE received for that inter-frequency measurement for event 1a.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

- 2> if the IE "UE autonomous update mode" is set to "on":
 - 3> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":
 - 4> send a MEASUREMENT REPORT with IEs set as follows:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in a virtual active set of the non-used frequency considered in the inter-frequency measurement;
 - 5> do not include the IEs "measured results" or "additional measured results".
- 2> if the IE "UE autonomous update mode" is set to "Off":

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

- 3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":
- 4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.
- 3> otherwise:
- 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement;
and
- 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.
- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" were not included in the MEASUREMENT CONTROL message; and
- 1> the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" are not stored for this measurement in the variable MEASUREMENT_IDENTITY:
- 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
- 3> for each non-used frequency F_i considered in the measurement:
- 4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 or the greatest downlink RSCP after despreading or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:
- 5> if event 1a is configured for the used frequency in an intra-frequency measurement:
- $$N_i = \min(N_{Ia}, N_{Cells Fi}) \text{ if } N_{Ia} \neq 0 \text{ and } N_i = N_{Cells Fi} \text{ otherwise.}$$
- where:
- N_{Ia} is the "Reporting deactivation threshold" included in the intra-frequency measurement for the first event 1a defined in the intra-frequency measurement with the lowest identity.
- $N_{Cells Fi}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.
- 5> else:
- $$N_i = N_{Cells Fi}$$
- where:
- $N_{Cells Fi}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.
- 3> if the IE "UE autonomous update mode" is set to "on":
- 4> if event 1a is configured for the used frequency in an intra-frequency measurement:
- 5> send a measurement report with IEs set as follows:
- 6> set the Measurement identity to the identity of the inter-frequency measurement;

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

6> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in the initial virtual active set of the non-used frequency considered in that measurement;

6> do not include the IEs "measured results" or "additional measured results".

2> if the IE "UE autonomous update mode" is set to "off":

3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":

4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.

3> otherwise:

4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement;
and

4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

14.11.2 Virtual active set update during an inter-frequency measurement

If the IE "Intra-frequency measurement reporting criteria" is stored for an inter-frequency measurement [and Event 1A is configured](#), the UE shall:

- 1> ~~if Event 1a is configured in that IE~~, when [Event 1a](#) ~~this event~~ is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.1):
 - 2> if the "Reporting deactivation threshold" is equal to 0, or if the "Reporting deactivation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is less than or equal to the "Reporting deactivation threshold":
 - 3> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 4> add the primary CPICH that enters the reporting range to the "virtual active set".
 - 3> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 4> send a measurement report with IEs set as below:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;
 - 5> do not include the IEs "measured results" or "additional measured results".
 - 1> if Event 1b was configured, when this event is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.2):
 - 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting" and if the number of cells included in the virtual active set is greater than 1:
 - 3> remove the primary CPICH that leaves the reporting range from the "virtual active set".
 - 2> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 3> send a measurement report with IEs set as below:
 - 4> set the Measurement identity to the identity of the inter-frequency measurement;
 - 4> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1b, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;
 - 4> do not include the IEs "measured results" or "additional measured results".
 - 1> if Event 1c was configured, when this event is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.3):
 - 2> if the "Reporting activation threshold" is equal to 0, or if the "Reporting activation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is greater than or equal to the "Reporting activation threshold":
 - 3> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

- 4> rank all active and non-active primary CPICHs and take the n best cells to create a new "virtual active set", where n is the number of active primary CPICHs in the "virtual active set".
- 3> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 4> send a measurement report with IEs set as below:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1c, and in "Cell measurement event results" include the CPICH info of all the cells that satisfy the event, and the rest of the entries as the cells that were in the virtual active set before the event occurred and that are worse than the best cell that triggered the event, in the order of their measured value (best one first);
 - 5> do not include the IEs "measured results" or "additional measured results".

If the IE "Intra-frequency measurement reporting criteria" is stored for an inter-frequency measurement, the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

- 1> if event 1a is not configured:
 - 2> the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report.

If the IE "Intra-frequency measurement reporting criteria" is not stored for that inter-frequency measurement, the UE shall:

- 1> apply the events of type 1a, 1b and 1c that were defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was set up; and
- 1> update the virtual active set for the non-used frequencies considered in that measurement according to the following rules:
 - 2> if several events of type 1a (resp. 1b,1c) were defined for the used frequency when the inter-frequency measurement was set up, only the first 1a event (resp 1b, 1c) that was defined in the measurement with the lowest measurement identity shall apply to the non-used frequencies;
 - 2> all the cells considered in the inter-frequency measurements shall be able to affect the reporting range for event 1a and 1b. (i.e. the IE "Cells forbidden to affect reporting range" possibly stored for the intra-frequency measurements on the used frequency does not apply to the non-used frequencies considered in the inter-frequency measurement);
 - 2> the IEs "amount of reporting" and "reporting interval" that were stored for the intra-frequency measurements on the used frequency shall not be considered if reports of the virtual active set updates are needed.
- 1> if event 1a is applicable to the non-used frequencies considered in the inter-frequency measurement:
 - 2> when this event is triggered (according to the criteria described in subclause 14.1.2.1) by a cell for a non-used frequency considered in that measurement:
 - 23> if the "Reporting deactivation threshold" is equal to 0, or if the "Reporting deactivation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is less than or equal to the "Reporting deactivation threshold":
 - 34> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 45> add the primary CPICH that enters the reporting range to the "virtual active set".

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

34> if the IE "UE autonomous update mode" is set to "on" or "off":

4> send a measurement report with IEs set as below:

5> set the Measurement identity to the identity of the inter-frequency measurement;

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;

5> do not include the IEs "measured results" or "additional measured results".

42> if event 1b is applicable for the non-used frequencies considered in that inter-frequency measurement, when this event is triggered (according to the criteria described in subclause 14.1.2.2) by a cell for a non-used frequency considered in that measurement:

23> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting" and if the number of cells included in the virtual active set is greater than 1:

34> remove the primary CPICH that leaves the reporting range from the "virtual active set".

23> if the IE "UE autonomous update mode" is set to "on" or "off", send a measurement report with IEs set as below:

34> set the Measurement identity to the identity of the inter-frequency measurement;

34> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1b, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;

34> do not include the IEs "measured results" or "additional measured results".

42> if event 1c is applicable for the non-used frequencies considered in that inter-frequency measurement, when this event is triggered (according to the criteria described in subclause 14.1.2.3) by a cell for a non-used frequency considered in that measurement:

23> if the "Reporting activation threshold" is equal to 0, or if the "Reporting activation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is greater than or equal to the "Reporting activation threshold":

34> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

45> rank all active and non-active primary CPICHs and take the n best cells to create a new "virtual active set", where n is the number of active primary CPICHs in the "virtual active set".

34> if the IE "UE autonomous update mode" is set to "on" or "off":

4> send a measurement report with IEs set as below:

5> set the Measurement identity to the identity of the inter-frequency measurement.

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1c, and in "Cell measurement event results" include the CPICH info of all the non-active cells which satisfy the event, and the rest of the entries as the cells that were in the virtual active set before the event occurred and that are worse than the best cell that triggered the event, in the order of their measured value (best one first);

5> do not include the IEs "measured results" or "additional measured results".

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

If the IE "Intra-frequency measurement reporting criteria" is not stored for an inter-frequency measurement, the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

- 1> if Event 1a is not defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was set up:
- 2> the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report.

If none of the cells that are considered in the measurement on this frequency were measured, the UE may treat the virtual active set as empty and follow the appropriate initialisation procedured in subclause 14.11.1 when any relevant cell can first be measured.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

CHANGE REQUEST

⌘ **25.331** **CR 2269** ⌘ rev **1** ⌘ Current version: **6.0.1** ⌘

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:	⌘ [VAS] 1B-1C conflicts when 1A is not configured		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 02/2004
Category:	⌘ A	Release:	⌘ Rel-6
	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) Rel-6 (Release 6)

Reason for change:	⌘	<p style="background-color: green; color: black; padding: 2px;">Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.</p> <p><u>Reason for change:</u></p> <p>In clause 14.11.2 there is a requirement to continuously update the VAS if event 1A is not configured ("if event 1a is not configured:[...]the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report"). This conflicts with the requirements set for event 1B, 1C set in the same section, since the current wording suggests that even without event 1A configured, events 1B, 1C could be triggered.</p>
Summary of change:	⌘	Separated the conditions of having 1A configured and triggered so that 1B and 1C are only available when 1A is configured.
Consequences if not approved:	⌘	Wording will still suggest that events 1B/1C can be triggered when even 1A is not configured and this will conflict with the requirement for the UE to update the VAS autonomously and not send any measurement report.

Clauses affected:	⌘ 14.11.2				
Other specs affected:	<table style="display: inline-table; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Y</td> <td style="border: 1px solid black; padding: 2px;">N</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ 	Y	N		
Y	N				

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.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

14.11.1 Initial virtual active set

If the UE receives a MEASUREMENT CONTROL message that sets up or modifies an inter-frequency measurement and includes the IE "Inter-frequency set update", the UE shall:

- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" is included in the MEASUREMENT CONTROL message; or
- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" are stored for this measurement in the variable MEASUREMENT_IDENTITY:
- 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 3> for each non-used frequency F_i considered in the measurement:
 - 4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 , the greatest downlink RSCP after despreading, or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:

- 5> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":

$$N_i = \min(N_{1a}, N_{Cells\ F_i}) \text{ if } N_{1a} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{1a} is the "Reporting deactivation threshold" included in the "Intra-Frequency measurement" IE received for that inter-frequency measurement for event 1a.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

- 5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

- 2> if the IE "UE autonomous update mode" is set to "on":
 - 3> if event 1a is configured in the "Intra-Frequency measurement reporting criteria":
 - 4> send a MEASUREMENT REPORT with IEs set as follows:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in a virtual active set of the non-used frequency considered in the inter-frequency measurement;
 - 5> do not include the IEs "measured results" or "additional measured results".
- 2> if the IE "UE autonomous update mode" is set to "Off":

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

- 3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":
 - 4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.
- 3> otherwise:
 - 4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement; and
 - 4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.
- 1> if the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" were not included in the MEASUREMENT CONTROL message; and
- 1> the IE "Intra-Frequency measurement reporting criteria" and the IE "Parameters required for each event" are not stored for this measurement in the variable MEASUREMENT_IDENTITY:
- 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 3> for each non-used frequency F_i considered in the measurement:
 - 4> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 or the greatest downlink RSCP after despreading or the lowest pathloss (depending on what is indicated in the IE "inter-frequency measurement quantity"), among the cells on frequency F_i considered in that inter-frequency measurement, where:
 - 5> if event 1a is configured for the used frequency in an intra-frequency measurement:

$$N_i = \min(N_{Ia}, N_{Cells\ F_i}) \text{ if } N_{Ia} \neq 0 \text{ and } N_i = N_{Cells\ F_i} \text{ otherwise.}$$

where:

N_{Ia} is the "Reporting deactivation threshold" included in the intra-frequency measurement for the first event 1a defined in the intra-frequency measurement with the lowest identity.

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.
 - 5> else:

$$N_i = N_{Cells\ F_i}$$

where:

$N_{Cells\ F_i}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.
- 3> if the IE "UE autonomous update mode" is set to "on":
 - 4> if event 1a is configured for the used frequency in an intra-frequency measurement:
 - 5> send a measurement report with IEs set as follows:
 - 6> set the Measurement identity to the identity of the inter-frequency measurement;

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

6> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of all the cells included in the initial virtual active set of the non-used frequency considered in that measurement;

6> do not include the IEs "measured results" or "additional measured results".

2> if the IE "UE autonomous update mode" is set to "off":

3> if the IE "Measurement command" is set to "Modify", if the value previously stored for the IE "UE autonomous update mode" was also "Off":

4> apply the modifications indicated in the "Inter-frequency set update" to the virtual active set that was valid before the message was received for the non-used frequency considered in that inter-frequency measurement.

3> otherwise:

4> remove the possibly existing virtual active set of the non-used frequency considered in that measurement;
and

4> set the initial virtual active set for it according to the "Inter-frequency set update" included in the message.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

14.11.2 Virtual active set update during an inter-frequency measurement

If the IE "Intra-frequency measurement reporting criteria" is stored for an inter-frequency measurement [and Event 1A is configured](#), the UE shall:

- 1> ~~if Event 1a is configured in that IE~~, when [Event 1a](#) ~~this event~~ is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.1):
 - 2> if the "Reporting deactivation threshold" is equal to 0, or if the "Reporting deactivation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is less than or equal to the "Reporting deactivation threshold":
 - 3> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 4> add the primary CPICH that enters the reporting range to the "virtual active set".
 - 3> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 4> send a measurement report with IEs set as below:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;
 - 5> do not include the IEs "measured results" or "additional measured results".
 - 1> if Event 1b was configured, when this event is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.2):
 - 2> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting" and if the number of cells included in the virtual active set is greater than 1:
 - 3> remove the primary CPICH that leaves the reporting range from the "virtual active set".
 - 2> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 3> send a measurement report with IEs set as below:
 - 4> set the Measurement identity to the identity of the inter-frequency measurement;
 - 4> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1b, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;
 - 4> do not include the IEs "measured results" or "additional measured results".
 - 1> if Event 1c was configured, when this event is triggered by a cell for a non-used frequency considered in that measurement (according to the criteria described in subclause 14.1.2.3):
 - 2> if the "Reporting activation threshold" is equal to 0, or if the "Reporting activation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is greater than or equal to the "Reporting activation threshold":
 - 3> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

- 4> rank all active and non-active primary CPICHs and take the n best cells to create a new "virtual active set", where n is the number of active primary CPICHs in the "virtual active set".
- 3> if the IE "UE autonomous update mode" is set to "on" or "off":
 - 4> send a measurement report with IEs set as below:
 - 5> set the Measurement identity to the identity of the inter-frequency measurement;
 - 5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1c, and in "Cell measurement event results" include the CPICH info of all the cells that satisfy the event, and the rest of the entries as the cells that were in the virtual active set before the event occurred and that are worse than the best cell that triggered the event, in the order of their measured value (best one first);
 - 5> do not include the IEs "measured results" or "additional measured results".

If the IE "Intra-frequency measurement reporting criteria" is stored for an inter-frequency measurement, the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

- 1> if event 1a is not configured:
 - 2> the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report.

If the IE "Intra-frequency measurement reporting criteria" is not stored for that inter-frequency measurement, the UE shall:

- 1> apply the events of type 1a, 1b and 1c that were defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was set up; and
- 1> update the virtual active set for the non-used frequencies considered in that measurement according to the following rules:
 - 2> if several events of type 1a (resp. 1b,1c) were defined for the used frequency when the inter-frequency measurement was set up, only the first 1a event (resp 1b, 1c) that was defined in the measurement with the lowest measurement identity shall apply to the non-used frequencies;
 - 2> all the cells considered in the inter-frequency measurements shall be able to affect the reporting range for event 1a and 1b. (i.e. the IE "Cells forbidden to affect reporting range" possibly stored for the intra-frequency measurements on the used frequency does not apply to the non-used frequencies considered in the inter-frequency measurement);
 - 2> the IEs "amount of reporting" and "reporting interval" that were stored for the intra-frequency measurements on the used frequency shall not be considered if reports of the virtual active set updates are needed.
- 1> if event 1a is applicable to the non-used frequencies considered in the inter-frequency measurement:
 - 2> when this event is triggered (according to the criteria described in subclause 14.1.2.1) by a cell for a non-used frequency considered in that measurement:
 - 23> if the "Reporting deactivation threshold" is equal to 0, or if the "Reporting deactivation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is less than or equal to the "Reporting deactivation threshold":
 - 34> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":
 - 45> add the primary CPICH that enters the reporting range to the "virtual active set".

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

34> if the IE "UE autonomous update mode" is set to "on" or "off":

4> send a measurement report with IEs set as below:

5> set the Measurement identity to the identity of the inter-frequency measurement;

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1a, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;

5> do not include the IEs "measured results" or "additional measured results".

42> if event 1b is applicable for the non-used frequencies considered in that inter-frequency measurement, when this event is triggered (according to the criteria described in subclause 14.1.2.2) by a cell for a non-used frequency considered in that measurement:

23> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting" and if the number of cells included in the virtual active set is greater than 1:

34> remove the primary CPICH that leaves the reporting range from the "virtual active set".

23> if the IE "UE autonomous update mode" is set to "on" or "off", send a measurement report with IEs set as below:

34> set the Measurement identity to the identity of the inter-frequency measurement;

34> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1b, and in "Cell measurement event results" the CPICH info of the cell that triggered the event;

34> do not include the IEs "measured results" or "additional measured results".

42> if event 1c is applicable for the non-used frequencies considered in that inter-frequency measurement, when this event is triggered (according to the criteria described in subclause 14.1.2.3) by a cell for a non-used frequency considered in that measurement:

23> if the "Reporting activation threshold" is equal to 0, or if the "Reporting activation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is greater than or equal to the "Reporting activation threshold":

34> if the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

45> rank all active and non-active primary CPICHs and take the n best cells to create a new "virtual active set", where n is the number of active primary CPICHs in the "virtual active set".

34> if the IE "UE autonomous update mode" is set to "on" or "off":

4> send a measurement report with IEs set as below:

5> set the Measurement identity to the identity of the inter-frequency measurement.

5> set the CHOICE event result in the IE Event results to Intra-frequency measurement event results, Intra-frequency event identity to 1c, and in "Cell measurement event results" include the CPICH info of all the non-active cells which satisfy the event, and the rest of the entries as the cells that were in the virtual active set before the event occurred and that are worse than the best cell that triggered the event, in the order of their measured value (best one first);

5> do not include the IEs "measured results" or "additional measured results".

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

If the IE "Intra-frequency measurement reporting criteria" is not stored for an inter-frequency measurement, the IE "UE autonomous update mode" is set to "on" or "on with no reporting":

- 1> if Event 1a is not defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was set up:
- 2> the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement, without sending any corresponding measurement report.

If none of the cells that are considered in the measurement on this frequency were measured, the UE may treat the virtual active set as empty and follow the appropriate initialisation procedured in subclause 14.11.1 when any relevant cell can first be measured.

TypeUnitOrDepartmentHere

TypeYourNameHere

TypeDateHere

CHANGE REQUEST

⌘ **25.331 CR 2270** ⌘ rev **1** ⌘ Current version: **5.7.1** ⌘

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:	⌘ Handling of wait time in RRC connection reject		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 09/02/2004
Category:	⌘ F	Release:	⌘ Rel-5
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

Section 8.1.3.9 described the UE behaviour on reception of RRC CONNECTION REJECT. However, there are 2 aspects which are not fully specified:

1/ If the message directs a the UE to another RAT or to another frequency then the UE is required to:

"disable cell reselection to the original RAT/original UTRA carrier until the time stated in the IE " wait time" has elapsed."

This text does not specify whether this requirement to disable reselection to the original RAT/UTRA carrier applies only until the UE has successfully established a connection (either an RRC Connection or a connection on the indicated RAT), or whether it also applies after the connection has been established and potentially even after the UE has returned to idle mode again.

2/ If the UE receives an RRC Connection Reject message that directs the UE to another frequency the UE will move to that frequency and disable reselection to the original frequency until the wait time has elapsed. However the cell on the new frequency could also redirect the UE to a third frequency and require the UE to disable reselection to that frequency until the wait timer has expired. Also, the new frequency could redirect the UE to back to the original frequency which would be in conflict with the original redirection. It is not specified how the UE is intended to handle such scenarios.

Summary of change: ⌘	<p>1/ It is proposed to clarify that the disabling of reselection to the original RAT or original UTRA frequency only applies until the RRC Connection establishment procedure ends (either successfully or unsuccessfully) or the UE successfully establishes a connection on the target RAT.</p> <p>2/ It is proposed to clarify that when the UE receives an RRC Connection Reject the UE can restart cell reselection to any frequency that is disabled. This newly received RRC Connection Reject could apply a redirection to a third frequency or back to the original frequency.</p>
Consequences if not approved: ⌘	<p>If the first aspect of the CR is not approved UEs may continue to disable cell reselections to a certain RAT or UTRA carrier after the RRC Connection Establishment procedure ends. This means, for example, that an RRC Connected mode UE may not perform expected cell reselections.</p> <p>If the second aspect CR is not approved then UE behaviour will be unpredictable in the case of multiple redirections. UEs may implement an unnecessary requirement to handle multiple wait timers for multiple frequencies simultaneously.</p>

Clauses affected: ⌘	8.1.3.9																
Other specs affected:	<table border="1"> <thead> <tr> <th style="width: 20px;">Y</th> <th style="width: 20px;">N</th> <th></th> <th style="width: 20px;">⌘</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Other core specifications</td> <td style="background-color: #ffffcc;"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Test specifications</td> <td style="background-color: #ffffcc;"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>O&M Specifications</td> <td style="background-color: #ffffcc;"></td> </tr> </tbody> </table>	Y	N		⌘	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications		<input type="checkbox"/>	<input checked="" type="checkbox"/>	O&M Specifications	
Y	N		⌘														
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications															
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications															
<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.

8.1.3.9 Reception of an RRC CONNECTION REJECT message by the UE

When the UE receives an RRC CONNECTION REJECT message on the downlink CCCH, it shall compare the value of the IE "Initial UE identity" in the received RRC CONNECTION REJECT message with the value of the variable INITIAL_UE_IDENTITY:

If the values are different, the UE shall ignore the rest of the message;

If the values are identical, the UE shall:

1> stop timer T300; and

1> clear the entry for the RRC CONNECTION REJECT message in the table "Accepted transactions" in the variable TRANSACTIONS;

1> if the UE has disabled cell reselection to a UTRA carrier due to an earlier RRC CONNECTION REJECT message, the UE shall resume cell reselection to that UTRA carrier;

1> if the IE "wait time" \neq '0'; and

1> if the IE "frequency info" is present and:

2> if V300 is equal to or smaller than N300:

3> select a suitable cell belonging to the selected PLMN or any PLMN indicated to be equivalent to that PLMN on the designated UTRA carrier;

3> after having selected and camped on a suitable cell on the designated UTRA carrier:

4> set CFN in relation to SFN of current cell according to subclause 8.5.15;

4> set the contents of the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;

4> transmit an RRC CONNECTION REQUEST message on the uplink CCCH;

4> reset counter V300;

4> start timer T300 when the MAC layer indicates success or failure in transmitting the message;

4> disable cell reselection to original UTRA carrier until the time stated in the IE "wait time" has elapsed or until the RRC connection establishment procedure ends, whichever occurs first;

3> if no suitable cell on the designated UTRA carrier is found:

4> wait for at least the time stated in the IE "wait time";

4> set CFN in relation to SFN of current cell according to subclause 8.5.15;

4> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;

4> then submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH of the original serving cell;

4> increment counter V300;

4> restart timer T300 when the MAC layer indicates success or failure to transmit the message;

2> if V300 is greater than N300:

3> enter idle mode;

- 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> if the IE "inter-RAT info" is present and:
- 2> if V300 is equal to or smaller than N300:
 - 3> select a suitable cell belonging to the selected PLMN or any PLMN indicated to be equivalent to that PLMN in the designated RAT;
 - 3> after having selected and camped on a suitable cell on the designated RAT:
 - 4> disable cell reselection to the original RAT until the time stated in the IE "wait time" has elapsed or until the UE successfully establishes a connection on the designated RAT, whichever occurs first.
 - 3> if no suitable cell in the designated RAT is found:
 - 4> wait at least the time stated in the IE "wait time";
 - 4> set CFN in relation to SFN of current cell according to subclause 8.5.15;
 - 4> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.2.
 - 4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;
 - 4> then submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;
 - 4> increment counter V300;
 - 4> restart timer T300 when the MAC layer indicates success or failure to transmit the message;
 - 2> if V300 is greater than N300:
 - 3> enter idle mode;
 - 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> If neither the IEs "frequency info" nor "inter-RAT info" are present and:
- 2> if V300 is equal to or smaller than N300:
 - 3> wait at least the time stated in the IE "wait time";
 - 3> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.2;
 - 3> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;
 - 3> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;
 - 3> increment counter V300;
 - 3> restart timer T300 when the MAC layer indicates success or failure to transmit the message;
 - 2> if V300 is greater than N300:
 - 3> enter idle mode;

- 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> if the IE "wait time" = '0':
- 2> enter idle mode;
 - 2> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 2> consider the RRC establishment procedure to be unsuccessful;
 - 2> the procedure ends.

CHANGE REQUEST

⌘ **25.331 CR 2271** ⌘ rev **1** ⌘ Current version: **6.0.1** ⌘

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:	⌘ Handling of wait time in RRC connection reject		
Source:	⌘ TSG RAN		
Work item code:	⌘ TEI5	Date:	⌘ 09/02/2004
Category:	⌘ A	Release:	⌘ Rel-6
	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 release)		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 be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change: ⌘

Implementation of this CR by a R99/Rel-4 UE will not cause compatibility issues.

Reason for change:

Section 8.1.3.9 described the UE behaviour on reception of RRC CONNECTION REJECT. However, there are 2 aspects which are not fully specified:

1/ If the message directs a the UE to another RAT or to another frequency then the UE is required to:

"disable cell reselection to the original RAT/original UTRA carrier until the time stated in the IE " wait time" has elapsed."

This text does not specify whether this requirement to disable reselection to the original RAT/UTRA carrier applies only until the UE has successfully established a connection (either an RRC Connection or a connection on the indicated RAT), or whether it also applies after the connection has been established and potentially even after the UE has returned to idle mode again.

2/ If the UE receives an RRC Connection Reject message that directs the UE to another frequency the UE will move to that frequency and disable reselection to the original frequency until the wait time has elapsed. However the cell on the new frequency could also redirect the UE to a third frequency and require the UE to disable reselection to that frequency until the wait timer has expired. Also, the new frequency could redirect the UE to back to the original frequency which would be in conflict with the original redirection. It is not specified how the UE is intended to handle such scenarios.

Summary of change: ⌘	<p>1/ It is proposed to clarify that the disabling of reselection to the original RAT or original UTRA frequency only applies until the RRC Connection establishment procedure ends (either successfully or unsuccessfully) or the UE successfully establishes a connection on the target RAT.</p> <p>2/ It is proposed to clarify that when the UE receives an RRC Connection Reject the UE can restart cell reselection to any frequency that is disabled. This newly received RRC Connection Reject could apply a redirection to a third frequency or back to the original frequency.</p>
Consequences if not approved: ⌘	<p>If the first aspect of the CR is not approved UEs may continue to disable cell reselections to a certain RAT or UTRA carrier after the RRC Connection Establishment procedure ends. This means, for example, that an RRC Connected mode UE may not perform expected cell reselections.</p> <p>If the second aspect CR is not approved then UE behaviour will be unpredictable in the case of multiple redirections. UEs may implement an unnecessary requirement to handle multiple wait timers for multiple frequencies simultaneously.</p>

Clauses affected: ⌘	8.1.3.9																
Other specs affected:	<table border="1"> <thead> <tr> <th style="width: 20px;">Y</th> <th style="width: 20px;">N</th> <th></th> <th style="width: 20px;">⌘</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Other core specifications</td> <td style="background-color: #ffffcc;"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Test specifications</td> <td style="background-color: #ffffcc;"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>O&M Specifications</td> <td style="background-color: #ffffcc;"></td> </tr> </tbody> </table>	Y	N		⌘	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications		<input type="checkbox"/>	<input checked="" type="checkbox"/>	O&M Specifications	
Y	N		⌘														
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications															
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications															
<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.

8.1.3.9 Reception of an RRC CONNECTION REJECT message by the UE

When the UE receives an RRC CONNECTION REJECT message on the downlink CCCH, it shall compare the value of the IE "Initial UE identity" in the received RRC CONNECTION REJECT message with the value of the variable INITIAL_UE_IDENTITY:

If the values are different, the UE shall ignore the rest of the message;

If the values are identical, the UE shall:

1> stop timer T300; and

1> clear the entry for the RRC CONNECTION REJECT message in the table "Accepted transactions" in the variable TRANSACTIONS;

1> if the UE has disabled cell reselection to a UTRA carrier due to an earlier RRC CONNECTION REJECT message, the UE shall resume cell reselection to that UTRA carrier;

1> if the IE "wait time" \neq '0'; and

1> if the IE "frequency info" is present and:

2> if V300 is equal to or smaller than N300:

3> select a suitable cell belonging to the selected PLMN or any PLMN indicated to be equivalent to that PLMN on the designated UTRA carrier;

3> after having selected and camped on a suitable cell on the designated UTRA carrier:

4> set CFN in relation to SFN of current cell according to subclause 8.5.15;

4> set the contents of the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;

4> transmit an RRC CONNECTION REQUEST message on the uplink CCCH;

4> reset counter V300;

4> start timer T300 when the MAC layer indicates success or failure in transmitting the message;

4> disable cell reselection to original UTRA carrier until the time stated in the IE "wait time" has elapsed or until the RRC connection establishment procedure ends, whichever occurs first;

3> if no suitable cell on the designated UTRA carrier is found:

4> wait for at least the time stated in the IE "wait time";

4> set CFN in relation to SFN of current cell according to subclause 8.5.15;

4> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;

4> then submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH of the original serving cell;

4> increment counter V300;

4> restart timer T300 when the MAC layer indicates success or failure to transmit the message;

2> if V300 is greater than N300:

3> enter idle mode;

- 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> if the IE "inter-RAT info" is present and:
- 2> if V300 is equal to or smaller than N300:
 - 3> select a suitable cell belonging to the selected PLMN or any PLMN indicated to be equivalent to that PLMN in the designated RAT;
 - 3> after having selected and camped on a suitable cell on the designated RAT:
 - 4> disable cell reselection to the original RAT until the time stated in the IE "wait time" has elapsed or until the UE successfully establishes a connection on the designated RAT, whichever occurs first.
 - 3> if no suitable cell in the designated RAT is found:
 - 4> wait at least the time stated in the IE "wait time";
 - 4> set CFN in relation to SFN of current cell according to subclause 8.5.15;
 - 4> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.2.
 - 4> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;
 - 4> then submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;
 - 4> increment counter V300;
 - 4> restart timer T300 when the MAC layer indicates success or failure to transmit the message;
 - 2> if V300 is greater than N300:
 - 3> enter idle mode;
 - 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> If neither the IEs "frequency info" nor "inter-RAT info" are present and:
- 2> if V300 is equal to or smaller than N300:
 - 3> wait at least the time stated in the IE "wait time";
 - 3> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.2;
 - 3> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13, and apply the given Access Service Class when accessing the RACH;
 - 3> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;
 - 3> increment counter V300;
 - 3> restart timer T300 when the MAC layer indicates success or failure to transmit the message;
 - 2> if V300 is greater than N300:
 - 3> enter idle mode;

- 3> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 3> consider the RRC establishment procedure to be unsuccessful;
 - 3> the procedure ends.
- 1> if the IE "wait time" = '0':
- 2> enter idle mode;
 - 2> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;
 - 2> consider the RRC establishment procedure to be unsuccessful;
 - 2> the procedure ends.