TSG-RAN Meeting #17 ***RP-020541***
Biarritz, France, 3 - 6 September 2002

Title: **Agreed CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331**

Source: **TSG-RAN WG2**

Agenda item: **7.2.3**

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Versio	Versio
R2-022048	agreed	25.331	1502	1	R99	UE behaviour when active set cells are not included in CELL_INFO_LIST	F	3.11.0	3.12.0
R2-022049	agreed	25.331	1503	1	Rel-4	UE behaviour when active set cells are not included in CELL_INFO_LIST	A	4.5.0	4.6.0
R2-022050	agreed	25.331	1504	1	Rel-5	UE behaviour when active set cells are not included in CELL_INFO_LIST	A	5.1.0	5.2.0
R2-022045	agreed	25.331	1505	1	R99	Corrections to handling of IE "Cells for measurement"	F	3.11.0	3.12.0
R2-022046	agreed	25.331	1506	1	Rel-4	Corrections to handling of IE "Cells for measurement"	A	4.5.0	4.6.0
R2-022047	agreed	25.331	1507	1	Rel-5	Corrections to handling of IE "Cells for measurement"	A	5.1.0	5.2.0
R2-021697	agreed	25.331	1508		R99	Clarification on the use of UE radio access capability extensions	F	3.11.0	3.12.0
R2-021698	agreed	25.331	1509		Rel-4	Clarification on the use of UE radio access capability extensions	A	4.5.0	4.6.0
R2-021699	agreed	25.331	1510		Rel-5	Clarification on the use of UE radio access capability extensions	A	5.1.0	5.2.0
R2-021700	agreed	25.331	1511		R99	Correction to RRC connection procedure	F	3.11.0	3.12.0
R2-021701	agreed	25.331	1512		Rel-4	Correction to RRC connection procedure	A	4.5.0	4.6.0
R2-021702	agreed	25.331	1513		Rel-5	Correction to RRC connection procedure	A	5.1.0	5.2.0
R2-021703	agreed	25.331	1514		R99	Correction to the variable TGPS_IDENTITY	F	3.11.0	3.12.0
R2-021704	agreed	25.331	1515		Rel-4	Correction to the variable TGPS_IDENTITY	A	4.5.0	4.6.0
R2-021705	agreed	25.331	1516		Rel-5	Correction to the variable TGPS_IDENTITY	A	5.1.0	5.2.0
R2-021707	agreed	25.331	1520		R99	Missing IEs in RLC info	F	3.11.0	3.12.0
R2-021603	agreed	25.331	1521		Rel-4	Missing IEs in RLC info	A	4.5.0	4.6.0
R2-021604	agreed	25.331	1522		Rel-5	Missing IEs in RLC info	A	5.1.0	5.2.0

3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022048

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1502** ⌘ **rev** **1** ⌘ Current version: **3.11.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	UE behaviour when active set cells are not included in CELL_INFO_LIST
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	July 2002
Category:	⌘	**F**
Release:	⌘	R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
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R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ The measurement behaviour of the UE is not clearly specified in the case that an ACTIVE SET UPDATE message is used to add a cell that is not part of the variable CELL_INFO_LIST to the active set. If a cell is not included in CELL_INFO_LIST there are parameters that are required for event evaluation that are not known to the UE. Hence, it is not clear how the UE can perform measurements and event evaluation on this cell.

Summary of change: ⌘ Revision 1:
The text that was proposed to be added to 8.3.4.3 in the first revision of this CR, is proposed to be moved to section 8.4.0. This because 8.4.0. is the general text on measurements.

The text is slightly generalised in order to make it not specific for the active set update procedure. This has the additional benefit that now also the case when the active set cell is no longer included in the CELL_INFO_LIST is addressed.

First revision:
In section 8.3.4.3, it is specified that when an active set update message adds a cell to the active set that is not part of the CELL_INFO_LIST, the UE shall not consider this cell for measurement and event evaluation.

Furthermore a note is added to capture the understanding that after such an active set update the UTRAN will send a MEASUREMENT CONTROL message to add the active set cell to the variable CELL_INFO_LIST.

Isolated Impact Analysis
Functionality corrected: Intra-frequency measurements

		Isolated impact statement: Correction to a function where specification was not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. **Impact on test specification** The behaviour covered by this CR is not currently cover in the test specifications. Hence, there is no impact of test specifications.
Consequences if not approved:	⌘	If the CR is not approved the behaviour of the UE will not be completely specified in the case that the network adds a cell to the active set that is not in CELL_INFO_LIST.

Clauses affected:	⌘	8.4.0			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:

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8.3.4.3 Reception of an ACTIVE SET UPDATE message by the UE

Upon reception of an ACTIVE SET UPDATE message the UE shall act upon all received information elements as specified in 8.6, unless specified otherwise in the following. The UE shall:

1> first add the RLs indicated in the IE "Radio Link Addition Information";

1> remove the RLs indicated in the IE "Radio Link Removal Information". If the UE active set is full or becomes full, an RL, which is included in the IE "Radio Link Removal Information" for removal, shall be removed before adding RL, which is included in the IE "Radio Link Addition Information" for addition;

1> perform the physical layer synchronisation procedure as specified in [29];

1> if the IE "TFCI combining indicator" associated with a radio link to be added is set to TRUE:

2> if a DSCH transport channel is assigned and there is a 'hard' split in the TFCI field:

3> configure Layer 1 to soft-combine TFCI (field 2) of this new link with those links already in the TFCI (field 2) combining set.

1> set the IE "RRC transaction identifier" in the ACTIVE SET UPDATE COMPLETE message to the value of "RRC transaction identifier" in the entry for the ACTIVE SET UPDATE message in the table "Accepted transactions" in the variable TRANSACTIONS; and

1> clear that entry;

1> transmit an ACTIVE SET UPDATE COMPLETE message on the uplink DCCH using AM RLC without waiting for the Physical Layer synchronisation;

1> the procedure ends on the UE side.

8.4 Measurement procedures

8.4.0 Measurement related definitions

UTRAN may control a measurement in the UE either by broadcast of SYSTEM INFORMATION and/or by transmitting a MEASUREMENT CONTROL message.

The following information is used to control the UE measurements and the measurement results reporting:

1. **Measurement identity**: A reference number that should be used by the UTRAN when setting up, modifying or releasing the measurement and by the UE in the measurement report.
2. **Measurement command**: One out of three different measurement commands.
   - Setup: Setup a new measurement.
   - Modify: Modify a previously defined measurement, e.g. to change the reporting criteria.
   - Release: Stop a measurement and clear all information in the UE that are related to that measurement.
3. **Measurement type**: One of the types listed below describing what the UE shall measure.

Presence or absence of the following control information depends on the measurement type

4. **Measurement objects:** The objects on which the UE shall measure measurement quantities, and corresponding object information.
5. **Measurement quantity:** The quantity the UE shall measure on the measurement object. This also includes the filtering of the measurements.
6. **Reporting quantities:** The quantities the UE shall include in the report in addition to the quantities that are mandatory to report for the specific event.
7. **Measurement reporting criteria**: The triggering of the measurement report, e.g. periodical or event-triggered reporting.
8. **Measurement Validity**: Defines in which UE states the measurement is valid.
9. **Measurement reporting mode**: This specifies whether the UE shall transmit the measurement report using AM or UM RLC.
10. **Additional measurement identities**: A list of references to other measurements. When this measurement triggers a measurement report, the UE shall also include the reporting quantities for the measurements referenced by the additional measurement identities.

All these measurement parameters depend on the measurement type and are described in more detail in clause 14.

The different types of measurements are:

- **Intra-frequency measurements**: measurements on downlink physical channels at the same frequency as the active set. A measurement object corresponds to one cell. Detailed description is found in subclause 14.1.
- **Inter-frequency measurements**: measurements on downlink physical channels at frequencies that differ from the frequency of the active set. A measurement object corresponds to one cell. Detailed description is found in subclause 14.2.
- **Inter-RAT measurements**: measurements on downlink physical channels belonging to another radio access technology than UTRAN, e.g. GSM. A measurement object corresponds to one cell. Detailed description is found in subclause 14.3.
- **Traffic volume measurements**: measurements on uplink traffic volume. A measurement object corresponds to one cell. Detailed description is found in subclause 14.4.

- **Quality measurements**: Measurements of downlink quality parameters, e.g. downlink transport block error rate. A measurement object corresponds to one transport channel in case of BLER. A measurement object corresponds to one timeslot in case of SIR (TDD only). Detailed description is found in subclause 14.5.

- **UE-internal measurements**: Measurements of UE transmission power and UE received signal level. Detailed description is found in subclause 14.6.

- **UE positioning measurements:** Measurements of UE position. Detailed description is found in subclause 14.7.

The UE shall support a number of measurements running in parallel as specified in [19] and [20]. The UE shall also support that each measurement is controlled and reported independently of every other measurement.

Cells that the UE is monitoring are grouped in the UE into three mutually exclusive categories:

1. Cells, which belong to the **active set.** User information is sent from all these cells. In FDD, the cells in the active set are involved in soft handover. In TDD the active set always comprises one cell only. The UE shall only consider active set cells included in the variable CELL_INFO_LIST for measurement. I.e. active set cells not included in the CELL_INFO_LIST shall not be considered in any event evaluation and measurement reporting.

2. Cells, which are not included in the active set, but are included in the CELL_INFO_LIST belong to the **monitored set.**

3. Cells detected by the UE, which are neither in the CELL_INFO_LIST nor in the active set belong to the **detected set.** Reporting of measurements of the detected set is only applicable to intra-frequency measurements made by UEs in CELL_DCH state.

If the IE "Cells for measurement" has been included in MEASUREMENT CONTROL or System Information Block type 11 or System Information Block type 12, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in MEASUREMENT CONTROL or System Information Block type 11 or System Information Block type 12, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement.

3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022049

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1503** ⌘ **rev** **1** ⌘ Current version: **4.5.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	UE behaviour when active set cells are not included in CELL_INFO_LIST
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	July 2002
Category:	⌘	**A**
Release:	⌘	Rel-4

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
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D *(editorial modification)*
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Reason for change: ⌘ The measurement behaviour of the UE is not clearly specified in the case that an ACTIVE SET UPDATE message is used to add a cell that is not part of the variable CELL_INFO_LIST to the active set. If a cell is not included in CELL_INFO_LIST there are parameters that are required for event evaluation that are not known to the UE. Hence, it is not clear how the UE can perform measurements and event evaluation on this cell.

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Other specs affected:	⌘	**Y**	**N**		
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3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022050

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1504** ⌘ **rev** **1** ⌘ Current version: **5.1.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	UE behaviour when active set cells are not included in CELL_INFO_LIST
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	July 2002
Category:	⌘	**A**
Release:	⌘	Rel-5

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Isolated Impact Analysis
Functionality corrected: Intra-frequency measurements

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Consequences if not approved:	⌘	If the CR is not approved the behaviour of the UE will not be completely specified in the case that the network adds a cell to the active set that is not in CELL_INFO_LIST.

Clauses affected:	⌘	8.4.0			
Other specs affected:	⌘	**Y**	**N**		
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			X	O&M Specifications	
Other comments:	⌘				

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   - Release: Stop a measurement and clear all information in the UE that are related to that measurement.
3. **Measurement type**: One of the types listed below describing what the UE shall measure.

Presence or absence of the following control information depends on the measurement type

4. **Measurement objects:** The objects on which the UE shall measure measurement quantities, and corresponding object information.
5. **Measurement quantity:** The quantity the UE shall measure on the measurement object. This also includes the filtering of the measurements.
6. **Reporting quantities:** The quantities the UE shall include in the report in addition to the quantities that are mandatory to report for the specific event.
7. **Measurement reporting criteria**: The triggering of the measurement report, e.g. periodical or event-triggered reporting.
8. **Measurement Validity**: Defines in which UE states the measurement is valid.
9. **Measurement reporting mode**: This specifies whether the UE shall transmit the measurement report using AM or UM RLC.
10. **Additional measurement identities**: A list of references to other measurements. When this measurement triggers a measurement report, the UE shall also include the reporting quantities for the measurements referenced by the additional measurement identities.

All these measurement parameters depend on the measurement type and are described in more detail in clause 14.

The different types of measurements are:

- **Intra-frequency measurements**: measurements on downlink physical channels at the same frequency as the active set. A measurement object corresponds to one cell. Detailed description is found in subclause 14.1.
- **Inter-frequency measurements**: measurements on downlink physical channels at frequencies that differ from the frequency of the active set. A measurement object corresponds to one cell. Detailed description is found in subclause 14.2.
- **Inter-RAT measurements**: measurements on downlink physical channels belonging to another radio access technology than UTRAN, e.g. GSM. A measurement object corresponds to one cell. Detailed description is found in subclause 14.3.
- **Traffic volume measurements**: measurements on uplink traffic volume. A measurement object corresponds to one cell. Detailed description is found in subclause 14.4.

- **Quality measurements**: Measurements of downlink quality parameters, e.g. downlink transport block error rate. A measurement object corresponds to one transport channel in case of BLER. A measurement object corresponds to one timeslot in case of SIR (TDD only). Detailed description is found in subclause 14.5.

- **UE-internal measurements**: Measurements of UE transmission power and UE received signal level. Detailed description is found in subclause 14.6.

- **UE positioning measurements:** Measurements of UE position. Detailed description is found in subclause 14.7.

The UE shall support a number of measurements running in parallel as specified in [19] and [20]. The UE shall also support that each measurement is controlled and reported independently of every other measurement.

Cells that the UE is monitoring are grouped in the UE into three mutually exclusive categories:

1. Cells, which belong to the **active set.** User information is sent from all these cells. In FDD, the cells in the active set are involved in soft handover. In TDD the active set always comprises one cell only. The UE shall only consider active set cells included in the variable CELL_INFO_LIST for measurement. I.e. active set cells not included in the CELL_INFO_LIST shall not be considered in any event evaluation or measurement reporting.

2. Cells, which are not included in the active set, but are included in the CELL_INFO_LIST belong to the **monitored set.**

3. Cells detected by the UE, which are neither in the CELL_INFO_LIST nor in the active set belong to the **detected set.** Reporting of measurements of the detected set is only applicable to intra-frequency measurements made by UEs in CELL_DCH state.

If the IE "Cells for measurement" has been included in MEASUREMENT CONTROL or System Information Block type 11 or System Information Block type 12, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in MEASUREMENT CONTROL or System Information Block type 11 or System Information Block type 12, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement.

3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022045

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1505** ⌘ **rev** **1** ⌘ Current version: **3.11.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Corrections to handling of IE "Cells for measurement"			
Source:	⌘	TSG-RAN WG2			
Work item code:	⌘	TEI	***Date:***	⌘	August 2002
Category:	⌘	**F**	***Release:***	⌘	R99

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

Revision 1:

In R0 of this CR, it was clarified that the "cells for measurement" is not applicable to active set cells: "cells for measurement" cannot be used to restrict the applicability of active set cells related to e.g. triggering condition, reporting range evaluation or the active set cells compared to in event 1c.

On the email reflector, questions were raised regarding the applicability of "cells for measurement" for inter-frequency measurements. For inter-frequency measurements, the intention is that the Virtual Active Set should be handled as if it was the active set (just on another frequency). This means that event evaluation of 1a,1b,1c in the inter-frequency case is aligned to the intra-frequency case.

As a result for the inter-frequency case this revision of the CR clarifies that the "cells for measurement" is also not applicable to cells in the virtual active set: "cells for measurement" can not be used to restrict the applicability of virtual active set cells related to frequency quality estimates, triggering condition or evaluation of virtual active set cells compared to in event 1c.

Changes made in Revision 1 are highlighted in yellow.

Revision 0:

Section 8.4.0 includes 2 inconsistencies/unclarities:

1) It incorrectly refers to the IE "cells for measurement" being relevant when received in SIB11/SIB12. However the IE is not included for the intra- and inter-frequency case, and for the inter-RAT case it is specified in 25.331 that the

	received information shall be ignored. 2) Allthough the section only talks about monitored set cells when discussing the IE “cells for measurement”, implementations might still incorrectly assume that the IE is also applicable to active set cells.
Summary of change: ⌘	1) The inconsistency is removed; 2) It is explicitely clarified that the IE “cells for measurement” is not applicable to active set cells or virtual active set cells; **Isolated Impact Change Analysis.** Impacted functionality: Usage of IE “cells for measurement” Correction to a function where specification was inconsistent. This CR has no impact on implementations already aware of the indicated inconsistencies and assuming the correct behaviour. UE implementations not aware of these inconsistencies might interprete the wrong broadcast information and might not report on relevant active set cells.
Consequences if not approved: ⌘	The description of the UE handling of the IE “cells for measurement” remains inconsistent which might lead to UE implementations interpreting the wrong broadcast information and not reporting on relevant active set cells

Clauses affected:	⌘	8.4.0			
Other specs affected:	⌘	**Y**	**N**		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.4.0 Measurement related definitions

UTRAN may control a measurement in the UE either by broadcast of SYSTEM INFORMATION and/or by transmitting a MEASUREMENT CONTROL message.

The following information is used to control the UE measurements and the measurement results reporting:

1. **Measurement identity**: A reference number that should be used by the UTRAN when setting up, modifying or releasing the measurement and by the UE in the measurement report.
2. **Measurement command**: One out of three different measurement commands.
   - Setup: Setup a new measurement.
   - Modify: Modify a previously defined measurement, e.g. to change the reporting criteria.
   - Release: Stop a measurement and clear all information in the UE that are related to that measurement.
3. **Measurement type**: One of the types listed below describing what the UE shall measure.

Presence or absence of the following control information depends on the measurement type

4. **Measurement objects:** The objects on which the UE shall measure measurement quantities, and corresponding object information.
5. **Measurement quantity:** The quantity the UE shall measure on the measurement object. This also includes the filtering of the measurements.
6. **Reporting quantities:** The quantities the UE shall include in the report in addition to the quantities that are mandatory to report for the specific event.
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8. **Measurement Validity**: Defines in which UE states the measurement is valid.
9. **Measurement reporting mode**: This specifies whether the UE shall transmit the measurement report using AM or UM RLC.
10. **Additional measurement identities**: A list of references to other measurements. When this measurement triggers a measurement report, the UE shall also include the reporting quantities for the measurements referenced by the additional measurement identities.

All these measurement parameters depend on the measurement type and are described in more detail in clause 14.

The different types of measurements are:

- **Intra-frequency measurements**: measurements on downlink physical channels at the same frequency as the active set. A measurement object corresponds to one cell. Detailed description is found in subclause 14.1.
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- **Inter-RAT measurements**: measurements on downlink physical channels belonging to another radio access technology than UTRAN, e.g. GSM. A measurement object corresponds to one cell. Detailed description is found in subclause 14.3.
- **Traffic volume measurements**: measurements on uplink traffic volume. A measurement object corresponds to one cell. Detailed description is found in subclause 14.4.
- **Quality measurements**: Measurements of downlink quality parameters, e.g. downlink transport block error rate. A measurement object corresponds to one transport channel in case of BLER. A measurement object corresponds to one timeslot in case of SIR (TDD only). Detailed description is found in subclause 14.5.

- **UE-internal measurements**: Measurements of UE transmission power and UE received signal level. Detailed description is found in subclause 14.6.

- **UE positioning measurements:** Measurements of UE position. Detailed description is found in subclause 14.7.

The UE shall support a number of measurements running in parallel as specified in [19] and [20]. The UE shall also support that each measurement is controlled and reported independently of every other measurement.

Cells that the UE is monitoring are grouped in the UE into three mutually exclusive categories:

1. Cells, which belong to the **active set.** User information is sent from all these cells. In FDD, the cells in the active set are involved in soft handover. In TDD the active set always comprises one cell only.

2. Cells, which are not included in the active set, but are included in the CELL_INFO_LIST belong to the **monitored set.**

3. Cells detected by the UE, which are neither in the CELL_INFO_LIST nor in the active set belong to the **detected set.** Reporting of measurements of the detected set is only applicable to intra-frequency measurements made by UEs in CELL_DCH state.

If the IE "Cells for measurement" has been included in a MEASUREMENT CONTROL message ~~or System Information Block type 11 or System Information Block type 12~~, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in a MEASUREMENT CONTROL message~~or System Information Block type 11 or System Information Block type 12~~, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement. The IE “Cells for measurement” is not applicable to active set cells or ~~,~~ virtual activ~~.~~e set cells e.g. when the triggering condition refers to active set cells, the UE shall consider all active set cells in the CELL_INFO_LIST for measurement irrespective if these cells are explicitely indicated by the IE “cells for measurement”.

3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022046

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1506** ⌘ **rev** **1** ⌘ Current version: **4.5.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Corrections to handling of IE "Cells for measurement"			
Source:	⌘	TSG-RAN WG2			
Work item code:	⌘	TEI	***Date:***	⌘	August 2002
Category:	⌘	**A**	***Release:***	⌘	Rel-4

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
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Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
Rel-4 *(Release 4)*
Rel-5 *(Release 5)*
Rel-6 *(Release 6)*

Reason for change: ⌘

Revision 1:

In R0 of this CR, it was clarified that the "cells for measurement" is not applicable to active set cells: "cells for measurement" cannot be used to restrict the applicability of active set cells related to e.g. triggering condition, reporting range evaluation or the active set cells compared to in event 1c.

On the email reflector, questions were raised regarding the applicability of "cells for measurement" for inter-frequency measurements. For inter-frequency measurements, the intention is that the Virtual Active Set should be handled as if it was the active set (just on another frequency). This means that event evaluation of 1a,1b,1c in the inter-frequency case is aligned to the intra-frequency case.

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Changes made in Revision 1 are highlighted in yellow.

Revision 0:

Section 8.4.0 includes 2 inconsistencies/unclarities:

1) It incorrectly refers to the IE "cells for measurement" being relevant when received in SIB11/SIB12. However the IE is not included for the intra- and inter-frequency case, and for the inter-RAT case it is specified in 25.331 that the

	received information shall be ignored. 2) Allthough the section only talks about monitored set cells when discussing the IE “cells for measurement”, implementations might still incorrectly assume that the IE is also applicable to active set cells.
Summary of change: ⌘	1) The inconsistency is removed; 2) It is explicitely clarified that the IE “cells for measurement” is not applicable to active set cells or virtual active set cells; **Isolated Impact Change Analysis.** Impacted functionality: Usage of IE “cells for measurement” Correction to a function where specification was inconsistent. This CR has no impact on implementations already aware of the indicated inconsistencies and assuming the correct behaviour. UE implementations not aware of these inconsistencies might interprete the wrong broadcast information and might not report on relevant active set cells.
Consequences if not approved: ⌘	The description of the UE handling of the IE “cells for measurement” remains inconsistent which might lead to UE implementations interpreting the wrong broadcast information and not reporting on relevant active set cells

Clauses affected:	⌘	8.4.0			
Other specs affected:	⌘	**Y**	**N**		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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3. **Measurement type**: One of the types listed below describing what the UE shall measure.

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8. **Measurement Validity**: Defines in which UE states the measurement is valid.
9. **Measurement reporting mode**: This specifies whether the UE shall transmit the measurement report using AM or UM RLC.
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If the IE "Cells for measurement" has been included in a MEASUREMENT CONTROL message ~~or System Information Block type 11 or System Information Block type 12~~, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in a MEASUREMENT CONTROL message~~or System Information Block type 11 or System Information Block type 12~~, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement. The IE “Cells for measurement” is not applicable to active set cells or ~~,~~ virtual activ~~.~~e set cells e.g. when the triggering condition refers to active set cells, the UE shall consider all active set cells in the CELL_INFO_LIST for measurement irrespective if these cells are explicitely indicated by the IE “cells for measurement”.

3GPP TSG-RAN WG2 Meeting #31
Stockholm, Sweden, 19 – 23 August 2002

R2-022047

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1507** ⌘ **rev** **1** ⌘ Current version: **5.1.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Corrections to handling of IE "Cells for measurement"			
Source:	⌘	TSG-RAN WG2			
Work item code:	⌘	TEI	***Date:*** ⌘	August 2002	
Category:	⌘	**A**	***Release:*** ⌘	Rel-5	

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘

Revision 1:

In R0 of this CR, it was clarified that the "cells for measurement" is not applicable to active set cells: "cells for measurement" cannot be used to restrict the applicability of active set cells related to e.g. triggering condition, reporting range evaluation or the active set cells compared to in event 1c.

On the email reflector, questions were raised regarding the applicability of "cells for measurement" for inter-frequency measurements. For inter-frequency measurements, the intention is that the Virtual Active Set should be handled as if it was the active set (just on another frequency). This means that event evaluation of 1a,1b,1c in the inter-frequency case is aligned to the intra-frequency case.

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Changes made in Revision 1 are highlighted in yellow.

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Section 8.4.0 includes 2 inconsistencies/unclarities:

1) It incorrectly refers to the IE "cells for measurement" being relevant when received in SIB11/SIB12. However the IE is not included for the intra- and inter-frequency case, and for the inter-RAT case it is specified in 25.331 that the

	received information shall be ignored. 2) Allthough the section only talks about monitored set cells when discussing the IE “cells for measurement”, implementations might still incorrectly assume that the IE is also applicable to active set cells.
Summary of change: ⌘	1) The inconsistency is removed; 2) It is explicitely clarified that the IE “cells for measurement” is not applicable to active set cells or virtual active set cells; **Isolated Impact Change Analysis.** Impacted functionality: Usage of IE “cells for measurement” Correction to a function where specification was inconsistent. This CR has no impact on implementations already aware of the indicated inconsistencies and assuming the correct behaviour. UE implementations not aware of these inconsistencies might interprete the wrong broadcast information and might not report on relevant active set cells.
Consequences if not approved: ⌘	The description of the UE handling of the IE “cells for measurement” remains inconsistent which might lead to UE implementations interpreting the wrong broadcast information and not reporting on relevant active set cells

Clauses affected:	⌘	8.4.0			
Other specs affected:	⌘	**Y**	**N**		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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8.4.0 Measurement related definitions

// partly omitted

If the IE "Cells for measurement" has been included in a MEASUREMENT CONTROL message ~~or System Information Block type 11 or System Information Block type 12~~, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in a MEASUREMENT CONTROL message~~or System Information Block type 11 or System Information Block type 12~~, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement. The IE “Cells for measurement” is not applicable to active set cells or~~,~~ virtual~~,~~ active set cells e.g. when the triggering condition refers to active set cells, the UE shall consider all active set cells in the CELL_INFO_LIST for measurement irrespective if these cells are explicitely indicated by the IE “cells for measurement”.

3GPP TSG-RAN WG2 Meeting #30
Turin, Italy, June 24th-28th, 2002

Tdoc ⌘ R2-021697

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1508** ⌘ **rev** **-** ⌘ Current version: **3.11.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title: ⌘	Clarification on the use of UE radio access capability extensions within the INTERAT HANDOVER INFO message	
Source: ⌘	TSG RAN WG2	
Work item code: ⌘	TEI	***Date:*** ⌘ 24-06-2002
Category: ⌘	**F**	***Release:*** ⌘ R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message are ambiguous

UEs that do not require compressed mode to perform inter RAT measurents are currently not required to report certain measurements

Summary of change: ⌘ The following changes are introduced in this CR

UE radio access capabilities within the INTER RAT HANDOVER message

- In the tabular of the INTER RAT HANDOVER message the need of IE UE radio access capability extensions is changed to MP to align with the ASN.1
- Clarification is added that the UE shall include valid capability information in the mandatory IE UE radio access capabilities even when this information is not really required

Reporting of measurements that may require compressed mode

- Clarification is added that the statement that UEs need not report certain inter RAT measurements if no compressed mode pattern is configured for it does not apply for UEs that do not require compressed mode to perform such measurents

Impact analysis:

Impacted functionality: Handover from GSM to UMTS for a dual mode mobile supporting only the 2100 UTRA frequency band

Correction type: Clarification of a function where the specification is incomplete and ambiguous. Would not affect implementations behaving like indicated in the

		CR, would affect implementations supporting the corrected functionality otherwise Interoperability: • Isolated impact: the impact is isolated; only the corrected functionality is affected • CR implemented only by UTRAN: The current UE behaviour is unclear meaning that some dual mode UEs only supporting the 2100 UTRA frequency band may include capability information in the extension rather than in the original IE, as would be the case for the 1900 band, which may result in failure of the Handover from GSM to UMTS. • CR implemented only by UE: In this case no severe interoperability problems are foreseen e.g. the CR should not affect UTRANs only supporting the 2100 UTRA band since these may ignore the extension. UTRANs supporting the 1900 and the 2100 UTRA frequency band will have to handle the extension, but they may choose to either treat the duplicate information included in the extension or to ignore it Test specifications • There seems to be no test case that verifies the contents of the INTER RAT HANDOVER MESSAGE, which means there is no impact on the test cases
Consequences if not approved:	⌘	The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message remains ambiguous which may result in failure of the handover to UTRAN UEs that do not require compressed mode to perform inter RAT measurents may not report certain measurements

Clauses affected:	⌘	8.1.16.3, 8.6.7.6, 10.2.16d, 14.12.4.1			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.16 Inter RAT handover information transfer

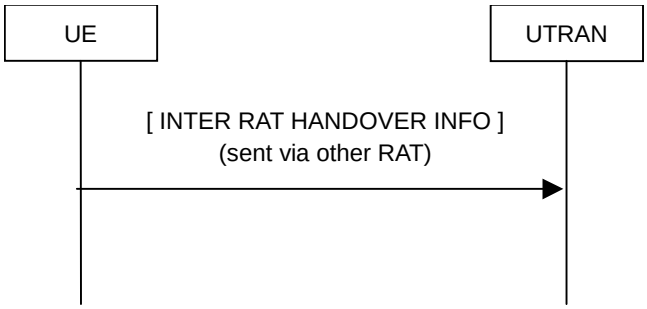

Figure 8.1.16-1: Inter RAT handover information transfer, normal flow

8.1.16.1 General

The inter RAT handover information transfer procedure is used by the UE to convey RRC information needed for inter RAT handover to UTRAN.

8.1.16.2 Initiation

If:

- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, orders the UE to provide the INTER RAT HANDOVER INFO message; or
- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, configures the UE to send the INTER RAT HANDOVER INFO message upon system specific conditions not involving an explicit order e.g. early classmark sending upon entering connected mode; or
- while in connected mode using another radio access technology, the inter RAT handover info changes compared to what has previously been sent via the other radio access technology:

the UE shall:

1> initiate the inter RAT handover information transfer procedure.

To determine if the inter RAT handover info has changed compared to what has previously been sent, the UE shall:

1> store the information last sent in the variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> if this variable has not yet been set:

2> not initiate the inter RAT handover information transfer procedure due to change of inter RAT handover info.

NOTE: Currently neither the UE security information nor the predefined configuration status information change while in connected mode using GSM radio access technology.

8.1.16.3 INTER RAT HANDOVER INFO message contents to set

The UE shall:

1> include the IE "Predefined configuration status information" and the IE "UE security information";

1> include the IE “UE capability container”, containing the IE "UE radio access capability" and the IE "UE radio access capability extension", in accordance with the following:

2> if the UE supports multiple UTRA FDD Frequency Bands; or

2> if the UE supports a single UTRA FDD Frequency Band different from 2100 MHz:

3> include the IE "UE radio access capability", excluding IEs "RF capability FDD" and "Measurement capability";

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

2> else:

3> include the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the 2100 MHz UTRA FDD frequency band~~.~~;

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

1> initiate the transfer of the INTER RAT HANDOVER INFO message via the other radio access technology, using radio access technology-specific procedures;

1> store the IE "Predefined configuration status information", the IE "UE security information", the IE "UE radio access capability" and the IE "UE radio access capability extension", if included in the INTER RAT HANDOVER MESSAGE, in variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> and the procedure ends.

8.6.7.6 Inter-RAT reporting quantity

If the IE "Inter-RAT reporting quantity" is received by the UE, the UE shall:

1> store the content of the IE to the variable MEASUREMENT_IDENTITY.

If the IE "Inter-RAT measurement quantity" is received and CHOICE system is GSM, the UE shall check each quantity in the GSM choice. The UE shall include measured results in MEASUREMENT REPORT as specified in the IE "Inter-RAT reporting quantity" with the following restrictions:

1> if the UE has not confirmed the BSIC of the measured cell:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results list", when a MEASUREMENT REPORT is triggered.

1> if the UE has confirmed the BSIC of the measured cell, then:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" nor "BSIC re-confirmation" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results", when a MEASUREMENT REPORT is triggered. If no compressed mode pattern sequence with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE may include "inter-RAT cell id" or "Observed time difference to GSM cell" in MEASUMENT REPORT without "GSM carrier RSSI" even if it is defined in the IE "Inter-RAT reporting quantity".

1> if the IE "UTRAN estimated quality" is set to "TRUE":

2> ignore that IE.

1> if IE "Observed time difference to GSM cell" is set to "TRUE":

2> include optional IE "Observed time difference to GSM cell" with the value set to the time difference to that GSM cell for the GSM cells that have a BSIC that is "verified", and that match any of the BCCH ARFCN and BSIC combinations in the list of inter-RAT cells that the UE has received in IE "Inter-RAT cell info list". Observed time difference to GSM cells with "non-verified" BSIC shall not be included.

1> if IE "GSM Carrier RSSI" is set to "TRUE":

2> include optional IE "GSM Carrier RSSI" with a value set to the measured RXLEV to that GSM cell in IE "Inter-RAT measured results list". If no compressed mode pattern sequence specified with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "GSM carrier RSSI" in the IE " Inter-RAT measured results list ", when a MEASUREMENT REPORT is triggered.

1> if the BSIC of reported GSM cell is "verified":

2> set the CHOICE BSIC to "Verified BSIC" and IE "inter-RAT cell id" to the value that GSM cell had in the IE "Inter-RAT cell info list".

1> if the BSIC of reported GSM cell is "non-verified":

2> set the CHOICE BSIC to "Non verified BSIC" and the IE "BCCH ARFCN" to the value of that GSM cells ARFCN.

The requirements for a cell to be considered "verified" or "non-verified" can be found in [19].

10.2.16d INTER RAT HANDOVER INFO

This message is sent by the UE via another radio access technology to provide information to the target RNC when preparing for a handover to UTRAN.

RLC-SAP: N/A (Sent through a different RAT)

Logical channel: N/A (Sent through a different RAT)

Direction: UE → UTRAN

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1

14.12.4.0a INTER RAT HANDOVER INFO

This RRC message is sent between network nodes to transfer information relevant for the target RNC when preparing for handover to UTRAN.

Direction: source RNC/RAT→target RAT

The message is exactly the same as the INTER RAT HANDOVER INFO defined in subclause 10.2.16d

14.12.4.1 INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES

This RRC message is sent between network nodes when preparing for an inter RAT handover to UTRAN.

Direction: source RAT→target RNC

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1
Non RRC IEs				
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
Other Information elements				
UE system specific capability	OP	1 to <maxSystemCapability>		
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	
Failure cause	OP		Failure cause 10.3.3.13	Diagnostics information related to an earlier handover to UTRAN request
Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12	

Condition	Explanation
ProtErr	This IE is mandatory present if the IE "Protocol error indicator" is included and has the value "TRUE". Otherwise it is not needed.

NOTE: The above table does not need to reflect the order of the information elements in the actual encoded message. The order, that is reflected in the ASN.1, should be chosen in a manner that avoids that network nodes need to perform reordering of information elements.

3GPP TSG-RAN WG2 Meeting #30
Turin, Italy, June 24th-28th, 2002

Tdoc ⌘ R2-021698

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1509** ⌘ **rev** **-** ⌘ Current version: **4.5.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Clarification on the use of UE radio access capability extensions within the INTERAT HANDOVER INFO message
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25-06-2002
Category:	⌘	**A**
Release:	⌘	REL-4

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘ The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message are ambiguous

UEs that do not require compressed mode to perform inter RAT measurents are currently not required to report certain measurements

Summary of change: ⌘ The following changes are introduced in this CR

UE radio access capabilities within the INTER RAT HANDOVER message

- In the tabular of the INTER RAT HANDOVER message the need of IE UE radio access capability extensions is changed to MP to align with the ASN.1
- Clarification is added that the UE shall include valid capability information in the mandatory IE UE radio access capabilities even when this information is not really required

Reporting of measurements that may require compressed mode

- Clarification is added that the statement that UEs need not report certain inter RAT measurements if no compressed mode pattern is configured for it does not apply for UEs that do not require compressed mode to perform such measurents

Consequences if not approved: ⌘ The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message remains ambiguous which may result in failure of the handover to UTRAN

UEs that do not require compressed mode to perform inter RAT measurents may

	not report certain measurements

Clauses affected:	⌘	8.1.16.3, 8.6.7.6, 10.2.16d, 14.12.4.1			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.16 Inter RAT handover information transfer

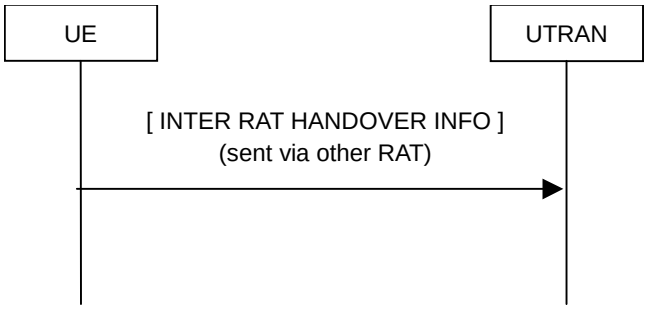

Figure 8.1.16-1: Inter RAT handover information transfer, normal flow

8.1.16.1 General

The inter RAT handover information transfer procedure is used by the UE to convey RRC information needed for inter RAT handover to UTRAN.

8.1.16.2 Initiation

If:

- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, orders the UE to provide the INTER RAT HANDOVER INFO message; or
- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, configures the UE to send the INTER RAT HANDOVER INFO message upon system specific conditions not involving an explicit order e.g. early classmark sending upon entering connected mode; or
- while in connected mode using another radio access technology, the inter RAT handover info changes compared to what has previously been sent via the other radio access technology:

the UE shall:

1> initiate the inter RAT handover information transfer procedure.

To determine if the inter RAT handover info has changed compared to what has previously been sent, the UE shall:

1> store the information last sent in the variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> if this variable has not yet been set:

2> not initiate the inter RAT handover information transfer procedure due to change of inter RAT handover info.

NOTE: Currently neither the UE security information nor the predefined configuration status information change while in connected mode using GSM radio access technology.

8.1.16.3 INTER RAT HANDOVER INFO message contents to set

The UE shall:

1> include the IE "Predefined configuration status information" and the IE "UE security information";

1> include the IE “UE capability container”, containing the IE "UE radio access capability" and the IE "UE radio access capability extension" in accordance with the following:

2> if the UE supports multiple UTRA FDD Frequency Bands; or

2> if the UE supports a single UTRA FDD Frequency Band different from 2100 MHz:

3> include the IE "UE radio access capability", excluding IEs "RF capability FDD" and "Measurement capability";

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

2> else:

3> include the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the 2100 MHz UTRA FDD frequency band~~.~~;

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

1> initiate the transfer of the INTER RAT HANDOVER INFO message via the other radio access technology, using radio access technology-specific procedures;

1> store the IE "Predefined configuration status information", the IE "UE security information", the IE "UE radio access capability" and the IE "UE radio access capability extension", if included in the INTER RAT HANDOVER MESSAGE, in variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> and the procedure ends.

8.6.7.6 Inter-RAT reporting quantity

If the IE "Inter-RAT reporting quantity" is received by the UE, the UE shall:

1> store the content of the IE to the variable MEASUREMENT_IDENTITY.

If the IE "Inter-RAT measurement quantity" is received and CHOICE system is GSM, the UE shall check each quantity in the GSM choice. The UE shall include measured results in MEASUREMENT REPORT as specified in the IE "Inter-RAT reporting quantity" with the following restrictions:

1> if the UE has not confirmed the BSIC of the measured cell:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results list", when a MEASUREMENT REPORT is triggered.

1> if the UE has confirmed the BSIC of the measured cell, then:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" nor "BSIC re-confirmation" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results", when a MEASUREMENT REPORT is triggered. If no compressed mode pattern sequence with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE may include "inter-RAT cell id" or "Observed time difference to GSM cell" in MEASUMENT REPORT without "GSM carrier RSSI" even if it is defined in the IE "Inter-RAT reporting quantity".

1> if the IE "UTRAN estimated quality" is set to "TRUE":

2> ignore that IE.

1> if IE "Observed time difference to GSM cell" is set to "TRUE":

2> include optional IE "Observed time difference to GSM cell" with the value set to the time difference to that GSM cell for the GSM cells that have a BSIC that is "verified", and that match any of the BCCH ARFCN and BSIC combinations in the list of inter-RAT cells that the UE has received in IE "Inter-RAT cell info list". Observed time difference to GSM cells with "non-verified" BSIC shall not be included.

1> if IE "GSM Carrier RSSI" is set to "TRUE":

2> include optional IE "GSM Carrier RSSI" with a value set to the measured RXLEV to that GSM cell in IE "Inter-RAT measured results list". If no compressed mode pattern sequence specified with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "GSM carrier RSSI" in the IE " Inter-RAT measured results list ", when a MEASUREMENT REPORT is triggered.

1> if the BSIC of reported GSM cell is "verified":

2> set the CHOICE BSIC to "Verified BSIC" and IE "inter-RAT cell id" to the value that GSM cell had in the IE "Inter-RAT cell info list".

1> if the BSIC of reported GSM cell is "non-verified":

2> set the CHOICE BSIC to "Non verified BSIC" and the IE "BCCH ARFCN" to the value of that GSM cells ARFCN.

The requirements for a cell to be considered "verified" or "non-verified" can be found in [19].

10.2.16d INTER RAT HANDOVER INFO

This message is sent by the UE via another radio access technology to provide information to the target RNC when preparing for a handover to UTRAN.

RLC-SAP: N/A (Sent through a different RAT)

Logical channel: N/A (Sent through a different RAT)

Direction: UE → UTRAN

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1

14.12.4.0a INTER RAT HANDOVER INFO

This RRC message is sent between network nodes to transfer information relevant for the target RNC when preparing for handover to UTRAN.

Direction: source RNC/RAT→target RAT

The message is exactly the same as the INTER RAT HANDOVER INFO defined in subclause 10.2.16d

14.12.4.1 INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES

This RRC message is sent between network nodes when preparing for an inter RAT handover to UTRAN.

Direction: source RAT→target RNC

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1
Non RRC IEs				
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
Other Information elements				
UE system specific capability	OP	1 to <maxSystemCapability>		
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	
Failure cause	OP		Failure cause 10.3.3.13	Diagnostics information related to an earlier handover to UTRAN request
Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12	

Condition	Explanation
ProtErr	This IE is mandatory present if the IE "Protocol error indicator" is included and has the value "TRUE". Otherwise it is not needed.

NOTE: The above table does not need to reflect the order of the information elements in the actual encoded message. The order, that is reflected in the ASN.1, should be chosen in a manner that avoids that network nodes need to perform reordering of information elements.

3GPP TSG-RAN WG2 Meeting #30
Turin, Italy, June 24th-28th, 2002

Tdoc ⌘ R2-021699

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1510** ⌘ **rev** **-** ⌘ Current version: **5.1.0** ⌘

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

Proposed change affects: UICC apps⌘ [ ] ME [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Clarification on the use of UE radio access capability extensions within the INTERAT HANDOVER INFO message
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25-06-2002
Category:	⌘	**A**
Release:	⌘	REL-5

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘ The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message are ambiguous

UEs that do not require compressed mode to perform inter RAT measurents are currently not required to report certain measurements

Summary of change: ⌘ The following changes are introduced in this CR

UE radio access capabilities within the INTER RAT HANDOVER message

- In the tabular of the INTER RAT HANDOVER message the need of IE UE radio access capability extensions is changed to MP to align with the ASN.1
- Clarification is added that the UE shall include valid capability information in the mandatory IE UE radio access capabilities even when this information is not really required

Reporting of measurements that may require compressed mode

- Clarification is added that the statement that UEs need not report certain inter RAT measurements if no compressed mode pattern is configured for it does not apply for UEs that do not require compressed mode to perform such measurents

Consequences if not approved: ⌘ The UE requirements on setting the contents of the UE radio access capabilities within the INTER RAT HANDOVER message remains ambiguous which may result in failure of the handover to UTRAN

UEs that do not require compressed mode to perform inter RAT measurents may

	not report certain measurements

Clauses affected:	⌘	8.1.16.3, 8.6.7.6, 10.2.16d, 14.12.4.1			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.16 Inter RAT handover information transfer

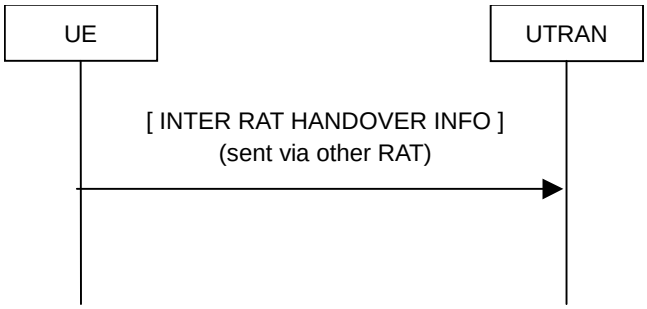

Figure 8.1.16-1: Inter RAT handover information transfer, normal flow

8.1.16.1 General

The inter RAT handover information transfer procedure is used by the UE to convey RRC information needed for inter RAT handover to UTRAN.

8.1.16.2 Initiation

If:

- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, orders the UE to provide the INTER RAT HANDOVER INFO message; or
- a radio access technology other than UTRA, e.g. GSM, using radio access technology-specific procedures, configures the UE to send the INTER RAT HANDOVER INFO message upon system specific conditions not involving an explicit order e.g. early classmark sending upon entering connected mode; or
- while in connected mode using another radio access technology, the inter RAT handover info changes compared to what has previously been sent via the other radio access technology:

the UE shall:

1> initiate the inter RAT handover information transfer procedure.

To determine if the inter RAT handover info has changed compared to what has previously been sent, the UE shall:

1> store the information last sent in the variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> if this variable has not yet been set:

2> not initiate the inter RAT handover information transfer procedure due to change of inter RAT handover info.

NOTE: Currently neither the UE security information nor the predefined configuration status information change while in connected mode using GSM radio access technology.

8.1.16.3 INTER RAT HANDOVER INFO message contents to set

The UE shall:

1> include the IE "Predefined configuration status information" and the IE "UE security information";

1> include the IE “UE capability container”, containing the IE "UE radio access capability" and the IE "UE radio access capability extension" in accordance with the following:

2> if the UE supports multiple UTRA FDD Frequency Bands; or

2> if the UE supports a single UTRA FDD Frequency Band different from 2100 MHz:

3> include the IE "UE radio access capability", excluding IEs "RF capability FDD" and "Measurement capability";

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

2> else:

3> include the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the 2100 MHz UTRA FDD frequency band~~.~~;

3> include the IE "UE radio access capability extension", including the IEs "RF capability FDD extension" and the "Measurement capability extension" associated with each supported UTRA FDD frequency band indicated in the IE "Frequency band".

1> initiate the transfer of the INTER RAT HANDOVER INFO message via the other radio access technology, using radio access technology-specific procedures;

1> store the IE "Predefined configuration status information", the IE "UE security information", the IE "UE radio access capability" and the IE "UE radio access capability extension", if included in the INTER RAT HANDOVER MESSAGE, in variable INTER_RAT_HANDOVER_INFO_TRANSFERRED;

1> and the procedure ends.

8.6.7.6 Inter-RAT reporting quantity

If the IE "Inter-RAT reporting quantity" is received by the UE, the UE shall:

1> store the content of the IE to the variable MEASUREMENT_IDENTITY.

If the IE "Inter-RAT measurement quantity" is received and CHOICE system is GSM, the UE shall check each quantity in the GSM choice. The UE shall include measured results in MEASUREMENT REPORT as specified in the IE "Inter-RAT reporting quantity" with the following restrictions:

1> if the UE has not confirmed the BSIC of the measured cell:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results list", when a MEASUREMENT REPORT is triggered.

1> if the UE has confirmed the BSIC of the measured cell, then:

2> if no compressed mode pattern sequence specified with measurement purpose "Initial BSIC identification" nor "BSIC re-confirmation" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "inter-RAT cell id" nor "Observed time difference to GSM cell" in the IE "Inter-RAT measured results", when a MEASUREMENT REPORT is triggered. If no compressed mode pattern sequence with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE may include "inter-RAT cell id" or "Observed time difference to GSM cell" in MEASUMENT REPORT without "GSM carrier RSSI" even if it is defined in the IE "Inter-RAT reporting quantity".

1> if the IE "UTRAN estimated quality" is set to "TRUE":

2> ignore that IE.

1> if IE "Observed time difference to GSM cell" is set to "TRUE":

2> include optional IE "Observed time difference to GSM cell" with the value set to the time difference to that GSM cell for the GSM cells that have a BSIC that is "verified", and that match any of the BCCH ARFCN and BSIC combinations in the list of inter-RAT cells that the UE has received in IE "Inter-RAT cell info list". Observed time difference to GSM cells with "non-verified" BSIC shall not be included.

1> if IE "GSM Carrier RSSI" is set to "TRUE":

2> include optional IE "GSM Carrier RSSI" with a value set to the measured RXLEV to that GSM cell in IE "Inter-RAT measured results list". If no compressed mode pattern sequence specified with measurement purpose "GSM carrier RSSI measurements" is active and according to its capabilities the UE requires compressed mode to measure this, the UE is not required to include the "GSM carrier RSSI" in the IE " Inter-RAT measured results list ", when a MEASUREMENT REPORT is triggered.

1> if the BSIC of reported GSM cell is "verified":

2> set the CHOICE BSIC to "Verified BSIC" and IE "inter-RAT cell id" to the value that GSM cell had in the IE "Inter-RAT cell info list".

1> if the BSIC of reported GSM cell is "non-verified":

2> set the CHOICE BSIC to "Non verified BSIC" and the IE "BCCH ARFCN" to the value of that GSM cells ARFCN.

The requirements for a cell to be considered "verified" or "non-verified" can be found in [19].

10.2.16d INTER RAT HANDOVER INFO

This message is sent by the UE via another radio access technology to provide information to the target RNC when preparing for a handover to UTRAN.

RLC-SAP: N/A (Sent through a different RAT)

Logical channel: N/A (Sent through a different RAT)

Direction: UE → UTRAN

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1

14.12.4.0a INTER RAT HANDOVER INFO

This RRC message is sent between network nodes to transfer information relevant for the target RNC when preparing for handover to UTRAN.

Direction: source RNC/RAT→target RAT

The message is exactly the same as the INTER RAT HANDOVER INFO defined in subclause 10.2.16d

14.12.4.1 INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES

This RRC message is sent between network nodes when preparing for an inter RAT handover to UTRAN.

Direction: source RAT→target RNC

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
UE Information elements				
UE security information	OP		UE security information 10.3.3.42b	
UE capability container	OP			
>UE radio access capability	~~O~~MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	~~O~~MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1
Non RRC IEs				
Radio Bearer IEs				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
Other Information elements				
UE system specific capability	OP	1 to <maxSystemCapability>		
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	
Failure cause	OP		Failure cause 10.3.3.13	Diagnostics information related to an earlier handover to UTRAN request
Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12	

Condition	Explanation
ProtErr	This IE is mandatory present if the IE "Protocol error indicator" is included and has the value "TRUE". Otherwise it is not needed.

NOTE: The above table does not need to reflect the order of the information elements in the actual encoded message. The order, that is reflected in the ASN.1, should be chosen in a manner that avoids that network nodes need to perform reordering of information elements.

3GPP TSG-RAN WG2 meeting #30 ***R2-021700***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1511** ⌘ **rev** **-** ⌘ Current version: **3.11.0** ⌘

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

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

Title:	⌘	Correction to RRC connection procedure
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25/06/2002
Category:	⌘	**F**
Release:	⌘	R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘

1. Incorrect indentation in subclause 8.1.3.8 prevents the bullets that follow from being performed.

2. Since the RRC CONNECTION REJECT message includes the IE “RRC transaction identifier”, this message will be stored in the table "Accepted transactions" or “Rejected transactions” in the variable TRANSACTIONS. So when UE processes this message, the corresponding entry in the variable TRANSACTIONS should be deleted.

3. When the UE ignores the TRANSPORT FORMAT COMBINATION CONTROL message received on UM RLC, the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS should be deleted.

Summary of change: ⌘

1. The indentation is changed so that the bullets that follow can be correctly performed.

2. The corresponding entry for the RRC CONNECTION REJECT message is deleted from the table in the variable TRANSACTIONS in subclause 8.1.3.9 and 8.1.3.10.

3. The entry for the TRANSPORT FORMAT COMBINATION CONTROL message is deleted from the table "Accepted transactions" in the variable TRANSACTIONS in subclause 8.2.5.4 Invalid configuration.

Isolated Impact Change Analysis.

Impacted functionality: RRC connection procedure.

		Correction to a function where specification was not complete. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	~~Incorrect UE behaviors are expected.~~ Incorrect indentation prevents the UE from re-transmitting the RRC CONNECTION REQUEST message for the mentioned situation. As a result the RRC connection will not be established if this situation happens.

Clauses affected:	⌘	8.3.1.8, 8.3.1.9, 8.3.1.10, 8.2.5.4			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.3.8 Invalid RRC CONNECTION SETUP message, unsupported configuration or invalid configuration

If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY, but the RRC CONNECTION SETUP message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows. The UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Rejected transactions" in the variable TRANSACTIONS and proceed as below~~;~~.

~~1> if~~ If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY; and

~~1>~~ the RRC CONNECTION SETUP message contained a configuration the UE does not support; and/or

~~1>~~ the variable UNSUPPORTED_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message; and/or

~~1>~~ the variable INVALID_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message:

the UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Accepted transactions" in the variable TRANSACTIONS and proceed as below;

~~1> if~~ If V300 is equal to or smaller than N300:

~~2~~1> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

~~2~~1> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

~~2~~1> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13; and

~~2~~1> apply the given Access Service Class when accessing the RACH;

~~2~~1> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

~~2~~1> increment counter V300; and

~~2~~1> restart timer T300 when the MAC layer indicates success or failure in transmitting the message.

~~1> if~~ If V300 is greater than N300:

~~2~~1> enter idle mode;

~~2~~1> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

~~2~~1> consider the RRC establishment procedure to be unsuccessful;

~~2~~1> the procedure ends.

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 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 IE "wait time" <> '0'; and

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

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

3> initiate cell selection on the designated UTRA carrier;

3> after having selected and camped on a cell:

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 carrier until the time stated in the IE "wait time" has elapsed;

3> if a cell selection on the designated carrier fails:

4> wait for 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> perform cell selection in the designated system;

3> delay cell reselection to the original system until the time stated in the IE " wait time" has elapsed.

3> if cell selection in the designated system fails:

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.

8.1.3.10 Invalid RRC CONNECTION REJECT message

If the UE receives an RRC CONNECTION REJECT message which contains an IE "Initial UE identity" with a value which is identical to the value of the IE "Initial UE identity" in the most recent RRC CONNECTION REQUEST message sent by the UE; but the RRC CONNECTION REJECT message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows:

The UE shall:

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

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

2> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

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

2> 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;

2> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

2> increment counter V300;

2> restart timer T300 when the MAC layer indicates success or failure to transmit the message.

1> if V300 is greater than N300:

2> enter idle mode;

2> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

2> consider the procedure to be successful;

2> the procedure ends.

8.2.5.4 Invalid configuration

If the variable INVALID_CONFIGURATION is set to TRUE due to the received TRANSPORT FORMAT COMBINATION CONTROL message the UE shall:

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on AM RLC:

2> keep the TFC subset existing before the TRANSPORT FORMAT COMBINATION CONTROL message was received;

2> transmit a TRANSPORT FORMAT COMBINATION CONTROL FAILURE message on the DCCH using AM RLC;

2> set the IE "RRC transaction identifier" in the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message to the value of "RRC transaction identifier" in the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS; and

2> clear that entry;

2> set the IE "failure cause" to "invalid configuration";

2> when the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message has been submitted to lower layers for transmission the procedure ends.

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on UM RLC:

2> ignore the TRANSPORT FORMAT COMBINATION CONTROL message

2> clear the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

3GPP TSG-RAN WG2 meeting #30 ***R2-021701***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1512** ⌘ **rev** **-** ⌘ Current version: **4.5.0** ⌘

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

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

Title:	⌘	Correction to RRC connection procedure
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25/06/2002
Category:	⌘	**A**
Release:	⌘	Rel-4

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

1. Incorrect indentation in subclause 8.1.3.8 prevents the bullets that follow from being performed.

2. Since the RRC CONNECTION REJECT message includes the IE “RRC transaction identifier”, this message will be stored in the table "Accepted transactions" or “Rejected transactions” in the variable TRANSACTIONS. So when UE processes this message, the corresponding entry in the variable TRANSACTIONS should be deleted.

3. When the UE ignores the TRANSPORT FORMAT COMBINATION CONTROL message received on UM RLC, the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS should be deleted.

Summary of change: ⌘

1. The indentation is changed so that the bullets that follow can be correctly performed.

2. The corresponding entry for the RRC CONNECTION REJECT message is deleted from the table in the variable TRANSACTIONS in subclause 8.1.3.9 and 8.1.3.10.

3. The entry for the TRANSPORT FORMAT COMBINATION CONTROL message is deleted from the table "Accepted transactions" in the variable TRANSACTIONS in subclause 8.2.5.4 Invalid configuration.

Isolated Impact Change Analysis.

Impacted functionality: RRC connection procedure.

		Correction to a function where specification was not complete. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	Incorrect indentation prevents the UE from re-transmitting the RRC CONNECTION REQUEST message for the mentioned situation. As a result the RRC connection will not be established if this situation happens.

Clauses affected:	⌘	8.3.1.8, 8.3.1.9, 8.3.1.10, 8.2.5.4			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.3.8 Invalid RRC CONNECTION SETUP message, unsupported configuration or invalid configuration

If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY, but the RRC CONNECTION SETUP message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows. The UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Rejected transactions" in the variable TRANSACTIONS and proceed as below;

~~1> if~~ If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY; and

~~1> the~~ the RRC CONNECTION SETUP message contained a configuration the UE does not support; and/or

~~1> the~~ the variable UNSUPPORTED_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message; and/or

~~1> the~~ the variable INVALID_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message:

the UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Accepted transactions" in the variable TRANSACTIONS and proceed as below;

~~1> if~~If V300 is equal to or smaller than N300:

~~2~~1> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

~~2~~1> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

~~2~~1> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13; and

~~2~~1> apply the given Access Service Class when accessing the RACH;

~~2~~1> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

~~2~~1> increment counter V300; and

~~2~~1> restart timer T300 when the MAC layer indicates success or failure in transmitting the message.

~~1> if~~ If V300 is greater than N300:

~~2~~1> enter idle mode;

~~2~~1> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

~~2~~1> consider the RRC establishment procedure to be unsuccessful;

~~2~~1> the procedure ends.

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 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 IE "wait time" <> '0'; and

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

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

3> initiate cell selection on the designated UTRA carrier;

3> after having selected and camped on a cell:

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 carrier until the time stated in the IE "wait time" has elapsed;

3> if a cell selection on the designated carrier fails:

4> wait for 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> perform cell selection in the designated system;

3> delay cell reselection to the original system until the time stated in the IE " wait time" has elapsed.

3> if cell selection in the designated system fails:

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.

8.1.3.10 Invalid RRC CONNECTION REJECT message

If the UE receives an RRC CONNECTION REJECT message which contains an IE "Initial UE identity" with a value which is identical to the value of the IE "Initial UE identity" in the most recent RRC CONNECTION REQUEST message sent by the UE; but the RRC CONNECTION REJECT message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows:

The UE shall:

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

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

2> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

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

2> 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;

2> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

2> increment counter V300;

2> restart timer T300 when the MAC layer indicates success or failure to transmit the message.

1> if V300 is greater than N300:

2> enter idle mode;

2> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

2> consider the procedure to be successful;

2> the procedure ends.

8.2.5.4 Invalid configuration

If the variable INVALID_CONFIGURATION is set to TRUE due to the received TRANSPORT FORMAT COMBINATION CONTROL message the UE shall:

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on AM RLC:

2> keep the TFC subset existing before the TRANSPORT FORMAT COMBINATION CONTROL message was received;

2> transmit a TRANSPORT FORMAT COMBINATION CONTROL FAILURE message on the DCCH using AM RLC;

2> set the IE "RRC transaction identifier" in the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message to the value of "RRC transaction identifier" in the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS; and

2> clear that entry;

2> set the IE "failure cause" to "invalid configuration";

2> when the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message has been submitted to lower layers for transmission the procedure ends.

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on UM RLC or TM RLC:

2> ignore the TRANSPORT FORMAT COMBINATION CONTROL message.

2> clear the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

3GPP TSG-RAN WG2 meeting #30 ***R2-021702***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1513** ⌘ **rev** **-** ⌘ Current version: **5.1.0** ⌘

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

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

Title:	⌘	Correction to RRC connection procedure			
Source:	⌘	TSG-RAN WG2			
Work item code:	⌘	TEI	***Date:***	⌘	25/06/2002
Category:	⌘	**A**	***Release:***	⌘	Rel-5

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

1. Incorrect indentation in subclause 8.1.3.8 prevents the bullets that follow from being performed.

2. Since the RRC CONNECTION REJECT message includes the IE “RRC transaction identifier”, this message will be stored in the table "Accepted transactions" or “Rejected transactions” in the variable TRANSACTIONS. So when UE processes this message, the corresponding entry in the variable TRANSACTIONS should be deleted.

3. When the UE ignores the TRANSPORT FORMAT COMBINATION CONTROL message received on UM RLC, the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS should be deleted.

Summary of change: ⌘

1. The indentation is changed so that the bullets that follow can be correctly performed.

2. The corresponding entry for the RRC CONNECTION REJECT message is deleted from the table in the variable TRANSACTIONS in subclause 8.1.3.9 and 8.1.3.10.

3. The entry for the TRANSPORT FORMAT COMBINATION CONTROL message is deleted from the table "Accepted transactions" in the variable TRANSACTIONS in subclause 8.2.5.4 Invalid configuration.

Isolated Impact Change Analysis.

Impacted functionality: RRC connection procedure.

		Correction to a function where specification was not complete. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	Incorrect indentation prevents the UE from re-transmitting the RRC CONNECTION REQUEST message for the mentioned situation. As a result the RRC connection will not be established if this situation happens.

Clauses affected:	⌘	8.3.1.8, 8.3.1.9, 8.3.1.10, 8.2.5.4			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1.3.8 Invalid RRC CONNECTION SETUP message, unsupported configuration or invalid configuration

If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY, but the RRC CONNECTION SETUP message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows. The UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Rejected transactions" in the variable TRANSACTIONS and proceed as below;

~~1> if~~ If the UE receives an RRC CONNECTION SETUP message which contains an IE "Initial UE identity" with a value which is identical to the value of the variable INITIAL_UE_IDENTITY; and

~~1>~~ the RRC CONNECTION SETUP message contained a configuration the UE does not support; and/or

~~1>~~ the variable UNSUPPORTED_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message; and/or

~~1>~~ the variable INVALID_CONFIGURATION becomes set to TRUE due to the received RRC CONNECTION SETUP message:

the UE shall:

1> clear the entry for the RRC CONNECTION SETUP message in the table "Accepted transactions" in the variable TRANSACTIONS and proceed as below;

~~1> if~~ If V300 is equal to or smaller than N300:

~~2~~1> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

~~2~~1> set the IEs in the RRC CONNECTION REQUEST message according to subclause 8.1.3.3;

~~2~~1> perform the mapping of the Access Class to an Access Service Class as specified in subclause 8.5.13; and

~~2~~1> apply the given Access Service Class when accessing the RACH;

~~2~~1> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

~~2~~1> increment counter V300; and

~~2~~1> restart timer T300 when the MAC layer indicates success or failure in transmitting the message.

~~1> if~~ If V300 is greater than N300:

~~2~~1> enter idle mode;

~~2~~1> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

~~2~~1> consider the RRC establishment procedure to be unsuccessful;

~~2~~1> the procedure ends.

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 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 IE "wait time" <> '0'; and

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

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

3> initiate cell selection on the designated UTRA carrier;

3> after having selected and camped on a cell:

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 carrier until the time stated in the IE "wait time" has elapsed;

3> if a cell selection on the designated carrier fails:

4> wait for 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> perform cell selection in the designated system;

3> delay cell reselection to the original system until the time stated in the IE " wait time" has elapsed.

3> if cell selection in the designated system fails:

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.

8.1.3.10 Invalid RRC CONNECTION REJECT message

If the UE receives an RRC CONNECTION REJECT message which contains an IE "Initial UE identity" with a value which is identical to the value of the IE "Initial UE identity" in the most recent RRC CONNECTION REQUEST message sent by the UE; but the RRC CONNECTION REJECT message contains a protocol error causing the variable PROTOCOL_ERROR_REJECT to be set to TRUE according to clause 9, the UE shall perform procedure specific error handling as follows:

The UE shall:

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

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

2> set the variable PROTOCOL_ERROR_INDICATOR to TRUE;

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

2> 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;

2> submit a new RRC CONNECTION REQUEST message to the lower layers for transmission on the uplink CCCH;

2> increment counter V300;

2> restart timer T300 when the MAC layer indicates success or failure to transmit the message.

1> if V300 is greater than N300:

2> enter idle mode;

2> perform the actions specified in subclause 8.5.2 when entering idle mode from connected mode;

2> consider the procedure to be successful;

2> the procedure ends.

8.2.5.4 Invalid configuration

If the variable INVALID_CONFIGURATION is set to TRUE due to the received TRANSPORT FORMAT COMBINATION CONTROL message the UE shall:

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on AM RLC:

2> keep the TFC subset existing before the TRANSPORT FORMAT COMBINATION CONTROL message was received;

2> transmit a TRANSPORT FORMAT COMBINATION CONTROL FAILURE message on the DCCH using AM RLC;

2> set the IE "RRC transaction identifier" in the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message to the value of "RRC transaction identifier" in the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS; and

2> clear that entry;

2> set the IE "failure cause" to "invalid configuration";

2> when the TRANSPORT FORMAT COMBINATION CONTROL FAILURE message has been submitted to lower layers for transmission the procedure ends.

1> if the TRANSPORT FORMAT COMBINATION CONTROL message was received on UM RLC or TM RLC:

2> ignore the TRANSPORT FORMAT COMBINATION CONTROL message.

2> clear the entry for the TRANSPORT FORMAT COMBINATION CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

3GPP TSG-RAN WG2 meeting #30 ***R2-021703***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1514** ⌘ **rev** **-** ⌘ Current version: **3.11.0** ⌘

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

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

Title:	⌘	Correction to the variable TGPS_IDENTITY
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25/06/2002
Category:	⌘	**F**
Release:	⌘	R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	1. According to how the variable TGPS_IDENTITY is used in the corresponding procedure, all the transmission gap pattern sequences should be included in this variable. Besides, the IE "Current TGPS Status Flag" should be included within each TGPS.
Summary of change:	⌘	1. IEs in the variable TGPS_IDENTITY are redefined. **Isolated Impact Change Analysis.** Impacted functionality: Transmission gap pattern sequence maintenance. Correction to a function where specification was not sufficient. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	~~Incorrect UE behaviors are expected.~~ The UE may maintain only one transmission gap pattern sequence. The compressed mode measurements associated with the missing transmission gap pattern sequences would not be performed.
Clauses affected:	⌘	13.4.25

Other specs affected:	⌘	Y	N		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	

Other comments: ⌘	

How to create CRs using this form:

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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.

13.4.25 TGPS_IDENTITY

This variable contains the configuration parameters of ~~a~~ all the configured compressed mode transmission gap pattern sequences.

~~Information Element/Group name~~	~~Need~~	~~Multi~~	~~Type and reference~~	~~Semantics description~~
~~TGPS_IDENTITY~~	~~OP~~		~~DPCH compressed mode info 10.3.6.33~~	~~Information as contained in the IE group "Transmission gap pattern sequence configuration parameters". Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.~~
~~Current TGPS Status Flag~~	~~MP~~		~~Enumerated(active, inactive)~~	~~This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive~~

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Transmission gap pattern sequence	~~MP~~OP	1 to <maxTGPS>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>TGPSI	MP		TGPSI 10.3.6.82	
>TGPS Status Flag	MP		Enumerated(activate, deactivate)	This flag indicates whether the Transmission Gap Pattern Sequence shall be activated or deactivated.
> Current TGPS Status Flag	MP		Enumerated(active, inactive)	This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive
>TGCFN	CV-*Active*		Integer (0..255)	Connection Frame Number of the first frame of the first pattern within the Transmission Gap Pattern Sequence.
>Transmission gap pattern sequence configuration parameters	MP			Information as contained in the IE group "Transmission gap pattern sequence configuration parameters" in IE “DPCH compressed mode info” 10.3.6.33.

Condition	Explanation
Active	This IE is mandatory present when the value of the IE "TGPS Status Flag" is "Activate" and not needed otherwise.

3GPP TSG-RAN WG2 meeting #30 ***R2-021704***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1515** ⌘ **rev** **-** ⌘ Current version: **4.5.0** ⌘

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

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

Title:	⌘	Correction to the variable TGPS_IDENTITY
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25/06/2002
Category:	⌘	**A**
Release:	⌘	Rel-4

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	1. According to how the variable TGPS_IDENTITY is used in the corresponding procedure, all the transmission gap pattern sequences should be included in this variable. Besides, the IE "Current TGPS Status Flag" should be included within each TGPS.
Summary of change:	⌘	1. IEs in the variable TGPS_IDENTITY are redefined. **Isolated Impact Change Analysis.** Impacted functionality: Transmission gap pattern sequence maintenance. Correction to a function where specification was not sufficient. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	The UE may maintain only one transmission gap pattern sequence. The compressed mode measurements associated with the missing transmission gap pattern sequences would not be performed.

Clauses affected:	⌘	13.4.25			
Other specs affected:	⌘	**Y**	**N**		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:
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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.

13.4.25 TGPS_IDENTITY

This variable contains the configuration parameters of ~~a~~ all the configured compressed mode transmission gap pattern sequences.

~~Information Element/Group name~~	~~Need~~	~~Multi~~	~~Type and reference~~	~~Semantics description~~
~~TGPS_IDENTITY~~	~~OP~~		~~DPCH compressed mode info 10.3.6.33~~	~~Information as contained in the IE group "Transmission gap pattern sequence configuration parameters". Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.~~
~~Current TGPS Status Flag~~	~~MP~~		~~Enumerated(active, inactive)~~	~~This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive~~

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Transmission gap pattern sequence	~~MP~~OP	1 to <maxTGPS>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>TGPSI	MP		TGPSI 10.3.6.82	
>TGPS Status Flag	MP		Enumerated(activate, deactivate)	This flag indicates whether the Transmission Gap Pattern Sequence shall be activated or deactivated.
> Current TGPS Status Flag	MP		Enumerated(active, inactive)	This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive
>TGCFN	CV-*Active*		Integer (0..255)	Connection Frame Number of the first frame of the first pattern within the Transmission Gap Pattern Sequence.
>Transmission gap pattern sequence configuration parameters	MP			Information as contained in the IE group "Transmission gap pattern sequence configuration parameters" in IE “DPCH compressed mode info” 10.3.6.33.

Condition	Explanation
Active	This IE is mandatory present when the value of the IE "TGPS Status Flag" is "Activate" and not needed otherwise.

3GPP TSG-RAN WG2 meeting #30 ***R2-021705***
Torino, Italy, 24th - 27th June 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1516** ⌘ **rev** **-** ⌘ Current version: **5.1.0** ⌘

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

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

Title:	⌘	Correction to the variable TGPS_IDENTITY
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	25/06/2002
Category:	⌘	**A**
Release:	⌘	Rel-5

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	1. According to how the variable TGPS_IDENTITY is used in the corresponding procedure, all the transmission gap pattern sequences should be included in this variable. Besides, the IE "Current TGPS Status Flag" should be included within each TGPS.
Summary of change:	⌘	1. IEs in the variable TGPS_IDENTITY are redefined. **Isolated Impact Change Analysis.** Impacted functionality: Transmission gap pattern sequence maintenance. Correction to a function where specification was not sufficient. The change has isolated impact to the UE; the UTRAN is not concerned by this change. It would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved:	⌘	The UE may maintain only one transmission gap pattern sequence. The compressed mode measurements associated with the missing transmission gap pattern sequences would not be performed.

Clauses affected:	⌘	13.4.25

Other specs affected: ⌘	Y	N		⌘
		X	Other core specifications	
		X	Test specifications	
		X	O&M Specifications	

Other comments:	⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

13.4.25 TGPS_IDENTITY

This variable contains the configuration parameters of ~~a~~ all the configured compressed mode transmission gap pattern sequences.

~~Information Element/Group name~~	~~Need~~	~~Multi~~	~~Type and reference~~	~~Semantics description~~
~~TGPS_IDENTITY~~	~~OP~~		~~DPCH compressed mode info 10.3.6.33~~	~~Information as contained in the IE group "Transmission gap pattern sequence configuration parameters".~~ ~~Cleared when entering UTRA RRC connected mode.~~ ~~Cleared when leaving UTRA RRC connected mode.~~
~~Current TGPS Status Flag~~	~~MP~~		~~Enumerated(active, inactive)~~	~~This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive~~

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Transmission gap pattern sequence	~~MP~~OP	1 to <maxTGPS>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>TGPSI	MP		TGPSI 10.3.6.82	
>TGPS Status Flag	MP		Enumerated(activate, deactivate)	This flag indicates whether the Transmission Gap Pattern Sequence shall be activated or deactivated.
> Current TGPS Status Flag	MP		Enumerated(active, inactive)	This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive
>TGCFN	CV-*Active*		Integer (0..255)	Connection Frame Number of the first frame of the first pattern within the Transmission Gap Pattern Sequence.
>Transmission gap pattern sequence configuration parameters	MP			Information as contained in the IE group "Transmission gap pattern sequence configuration parameters" in IE “DPCH compressed mode info” 10.3.6.33.

Condition	Explanation
Active	This IE is mandatory present when the value of the IE "TGPS Status Flag" is "Activate" and not needed otherwise.

3GPP TSG-RAN Meeting #30
Turin, Italy, 24th-27th June 2002

Tdoc ⌘R2-021707

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1520** ⌘ **rev** **-** ⌘ Current version: **3.b.0** ⌘

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

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

Title:	⌘	missing IEs in RLC info
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	2002-06-25
Category:	⌘	**F**
Release:	⌘	R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	It is currently not well specified what actions shall be done in the UE when optional IEs in RLC info is omitted. It is unclear if this means that the prvious value is unchanged or if the parameter shall not be used. It is clear that the first alternative is not feasible since this means that options can only be added and not turned-off. However this would be beneficial to clarify in the spec to avoid interoperability problems. It is also not clear which actions that shall be taken if the IE "RLC info" is not included in a reconfiguration message.
Summary of change:	⌘	It is clarified that when optional IEs in RLC info is omitted these parameters shall not be used. It is clarified that if the IE "RLC info" is absent in a reconfigiration message the UE shall continue to use the current RLC configuration.
Consequences if not approved:	⌘	**It the CR is implemented only in UTRAN, or only in the UE or not at all:** Potential misalignment between UTRAN and UE configuration after a reconfiguration of RLC messages has been performed. Potential loss of communication. **Impacts on T1 test specifications**: No impact foreseen.

Clauses affected:	⌘	8.6.4.5, 8.6.4.9

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	

Other comments: ⌘

How to create CRs using this form:

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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.

8.6.4.5 RB information to reconfigure

If the IE "RB information to reconfigure" is included, the UE shall apply the following actions on the radio bearer identified with the value of the IE "RB identity". The UE shall:

1> perform the actions for the IE "PDCP info", if present, according to subclause 8.6.4.10, applied for the radio bearer;

~~1> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer;~~

1> if the IE "RLC info" is present:

2> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer.

1> else:

2> continue using the current RLC configuration for the radio bearer.

1> perform the actions for the IE "RB mapping info", according to subclause 8.6.4.8, applied for the radio bearer;

1> if the IE "Downlink RLC mode" in the IE "RLC info" is set to "TM RLC":

2> configure delivery of erroneous SDUs in lower layers according to indication from upper layer [5].

1> if the IE "PDCP SN info" is included:

2> perform the actions as specified in subclause 8.6.4.11 applied for the radio bearer.

1> if the IE "RB stop/continue" is included; and

2> if the "RB identity" has a value greater than 2; and

3> if the value of the IE "RB stop/continue" is "stop":

4> configure the RLC entity for the radio bearer to stop;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "stopped" for that radio bearer.

3> if the value of the IE "RB stop/continue" is "continue":

4> configure the RLC entity for the radio bearer to continue;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "started" for that radio bearer.

2> if the IE "RB identity" is set to a value less than or equal to 2:

3> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.9 RLC Info

~~If the~~Upon reception of the IE "RLC Info" ~~is included~~, the UE shall:

1> configure the transmitting and receiving RLC entities in the UE for that radio bearer accordingly;

~~1> if IE "Polling Info" is absent:~~

~~2> remove any previously stored configuration for the IE "Polling Info".~~

~~If the IE "Transmission RLC discard" is not included for UM RLC or TM RLC, RLC discard procedure shall not be used for that radio bearer.~~

1> if the IE "Polling info" is present in the IE "RLC info":

2> for each present IE in the IE "Polling info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Polling info":

3> configure RLC to not use the corresponding function.

1> if the IE "Polling info" is absent:

2> configure RLC to not use the polling functionality.

1> if the IE "Downlink RLC STATUS info" is present in the IE "RLC info" (this IE is present for AM RLC):

2> for each present IE in the IE "Downlink RLC STATUS info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Downlink RLC STATUS info":

3> configure RLC to not use the corresponding function.

1> if the IE "Transmission RLC discard" is present:

2> configure the discard procedure in RLC according to the IE "Transmission RLC discard"

1> if the IE "Transmission RLC discard" is absent (only possible for TM RLC and UM RLC):

2> do not configure SDU discard in RLC;

3GPP TSG-RAN Meeting #30
Turin, Italy, 24th-27th June 2002

Tdoc ⌘R2-021603

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1521** ⌘ **rev** **-** ⌘ Current version: **4.5.0** ⌘

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

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

Title:	⌘	missing IEs in RLC info
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	2002-06-26
Category:	⌘	**A**
Release:	⌘	REL-4

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	It is currently not well specified what actions shall be done in the UE when optional IEs in RLC info is omitted. It is unclear if this means that the prvious value is unchanged or if the parameter shall not be used. It is clear that the first alternative is not feasible since this means that options can only be added and not turned-off. However this would be beneficial to clarify in the spec to avoid interoperability problems. It is also not clear which actions that shall be taken if the IE "RLC info" is not included in a reconfiguration message.
Summary of change:	⌘	It is clarified that when optional IEs in RLC info is omitted these parameters shall not be used. It is clarified that if the IE "RLC info" is absent in a reconfigiration message the UE shall continue to use the current RLC configuration.
Consequences if not approved:	⌘	**It the CR is implemented only in UTRAN, or only in the UE or not at all:** Potential misalignment between UTRAN and UE configuration after a reconfiguration of RLC messages has been performed. Potential loss of communication. **Impacts on T1 test specifications**: No impact foreseen.

Clauses affected:	⌘	8.6.4.5, 8.6.4.9

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	

Other comments: ⌘

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

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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.

8.6.4.5 RB information to reconfigure

If the IE "RB information to reconfigure" is included, the UE shall apply the following actions on the radio bearer identified with the value of the IE "RB identity". The UE shall:

1> perform the actions for the IE "PDCP info", if present, according to subclause 8.6.4.10, applied for the radio bearer;

~~1> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer;~~

1> if the IE "RLC info" is present:

2> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer.

1> else:

2> continue using the current RLC configuration for the radio bearer.

1> perform the actions for the IE "RB mapping info", according to subclause 8.6.4.8, applied for the radio bearer;

1> if the IE "Downlink RLC mode" in the IE "RLC info" is set to "TM RLC":

2> configure delivery of erroneous SDUs in lower layers according to indication from upper layer [5].

1> if the IE "PDCP SN info" is included:

2> perform the actions as specified in subclause 8.6.4.11 applied for the radio bearer.

1> if the IE "RB stop/continue" is included; and

2> if the "RB identity" has a value greater than 2; and

3> if the value of the IE "RB stop/continue" is "stop":

4> configure the RLC entity for the radio bearer to stop;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "stopped" for that radio bearer.

3> if the value of the IE "RB stop/continue" is "continue":

4> configure the RLC entity for the radio bearer to continue;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "started" for that radio bearer.

2> if the IE "RB identity" is set to a value less than or equal to 2:

3> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.9 RLC Info

~~If the~~Upon reception of the IE "RLC Info" ~~is included~~, the UE shall:

1> configure the transmitting and receiving RLC entities in the UE for that radio bearer accordingly;

~~1> if IE "Polling Info" is absent:~~

~~2> remove any previously stored configuration for the IE "Polling Info".~~

~~If the IE "Transmission RLC discard" is not included for UM RLC or TM RLC, RLC discard procedure shall not be used for that radio bearer.~~

1> if the IE "Polling info" is present in the IE "RLC info":

2> for each present IE in the IE "Polling info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Polling info":

3> configure RLC to not use the corresponding function.

1> if the IE "Polling info" is absent:

2> configure RLC to not use the polling functionality.

1> if the IE "Downlink RLC STATUS info" is present in the IE "RLC info" (this IE is present for AM RLC):

2> for each present IE in the IE "Downlink RLC STATUS info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Downlink RLC STATUS info":

3> configure RLC to not use the corresponding function.

1> if the IE "Transmission RLC discard" is present:

2> configure the discard procedure in RLC according to the IE "Transmission RLC discard"

1> if the IE "Transmission RLC discard" is absent (only possible for TM RLC and UM RLC):

2> do not configure SDU discard in RLC;

3GPP TSG-RAN Meeting #30
Turin, Italy, 24th-27th June 2002

Tdoc ⌘R2-021604

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **1522** ⌘ **rev** **-** ⌘ Current version: **5.1.0** ⌘

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

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

Title:	⌘	missing IEs in RLC info
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	TEI
Date:	⌘	2002-06-26
Category:	⌘	**A**
Release:	⌘	REL-5

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	It is currently not well specified what actions shall be done in the UE when optional IEs in RLC info is omitted. It is unclear if this means that the prvious value is unchanged or if the parameter shall not be used. It is clear that the first alternative is not feasible since this means that options can only be added and not turned-off. However this would be beneficial to clarify in the spec to avoid interoperability problems. It is also not clear which actions that shall be taken if the IE "RLC info" is not included in a reconfiguration message.
Summary of change:	⌘	It is clarified that when optional IEs in RLC info is omitted these parameters shall not be used. It is clarified that if the IE "RLC info" is absent in a reconfigiration message the UE shall continue to use the current RLC configuration.
Consequences if not approved:	⌘	**It the CR is implemented only in UTRAN, or only in the UE or not at all:** Potential misalignment between UTRAN and UE configuration after a reconfiguration of RLC messages has been performed. Potential loss of communication. **Impacts on T1 test specifications**: No impact foreseen.

Clauses affected:	⌘	8.6.4.5, 8.6.4.9

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	

Other comments: ⌘

How to create CRs using this form:

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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.

8.6.4.5 RB information to reconfigure

If the IE "RB information to reconfigure" is included, the UE shall apply the following actions on the radio bearer identified with the value of the IE "RB identity". The UE shall:

1> perform the actions for the IE "PDCP info", if present, according to subclause 8.6.4.10, applied for the radio bearer;

~~1> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer;~~

1> if the IE "RLC info" is present:

2> perform the actions for the IE "RLC info", according to subclause 8.6.4.9, applied for the radio bearer.

1> else:

2> continue using the current RLC configuration for the radio bearer.

1> perform the actions for the IE "RB mapping info", according to subclause 8.6.4.8, applied for the radio bearer;

1> if the IE "Downlink RLC mode" in the IE "RLC info" is set to "TM RLC":

2> configure delivery of erroneous SDUs in lower layers according to indication from upper layer [5].

1> if the IE "PDCP SN info" is included:

2> perform the actions as specified in subclause 8.6.4.11 applied for the radio bearer.

1> if the IE "RB stop/continue" is included; and

2> if the "RB identity" has a value greater than 2; and

3> if the value of the IE "RB stop/continue" is "stop":

4> configure the RLC entity for the radio bearer to stop;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "stopped" for that radio bearer.

3> if the value of the IE "RB stop/continue" is "continue":

4> configure the RLC entity for the radio bearer to continue;

4> set the IE "RB started" in the variable ESTABLISHED_RABS to "started" for that radio bearer.

2> if the IE "RB identity" is set to a value less than or equal to 2:

3> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.9 RLC Info

~~If the~~Upon reception of the IE "RLC Info" ~~is included~~, the UE shall:

1> configure the transmitting and receiving RLC entities in the UE for that radio bearer accordingly;

~~1> if IE "Polling Info" is absent:~~

~~2> remove any previously stored configuration for the IE "Polling Info".~~

~~If the IE "Transmission RLC discard" is not included for UM RLC or TM RLC, RLC discard procedure shall not be used for that radio bearer.~~

1> if the IE "Polling info" is present in the IE "RLC info":

2> for each present IE in the IE "Polling info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Polling info":

3> configure RLC to not use the corresponding function.

1> if the IE "Polling info" is absent:

2> configure RLC to not use the polling functionality.

1> if the IE "Downlink RLC STATUS info" is present in the IE "RLC info" (this IE is present for AM RLC):

2> for each present IE in the IE "Downlink RLC STATUS info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Downlink RLC STATUS info":

3> configure RLC to not use the corresponding function.

1> if the IE "Transmission RLC discard" is present:

2> configure the discard procedure in RLC according to the IE "Transmission RLC discard"

1> if the IE "Transmission RLC discard" is absent (only possible for TM RLC and UM RLC):

2> do not configure SDU discard in RLC;