TSG-RAN Meeting #22 **RP-030630**
Maui, USA, 09-12 December 2003

Title: **UMTS 800 and new bands: 25.307 (R'99/Rel-4/Rel-5/Rel-6) and 25.331 (Rel-6) CRs**

Source: **TSG-RAN WG2**

Agenda item: **8.1.3**

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Workitem
25.307	007	1	R99	Introduction of UMTS800	B	3.1.0	3.2.0	R2-032709	RinImp-UMTS800
25.307	008	1	Rel-4	Introduction of UMTS800	B	4.1.0	4.2.0	R2-032710	RinImp-UMTS800
25.307	009	1	Rel-5	Introduction of UMTS800	B	5.0.0	5.1.0	R2-032711	RinImp-UMTS800
25.307	010	-	Rel-6	Introduction of UMTS800	B	5.0.0	6.0.0	R2-032596	RinImp-UMTS800
25.331	2133	-	Rel-6	Introduction of UMTS800	B	5.6.0	6.0.0	R2-032592	RinImp-UMTS800
25.331	2160	-	Rel-6	Introduction of new bands	B	5.6.0	6.0.0	R2-032725	RinImp-UMTS800

3GPP TSG-RAN WG2 Meeting #39
San Diego, USA, November 17-21

Tdoc ⌘R2-032709

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CHANGE REQUEST

⌘ **25.307** **CR** **007** ⌘**rev** **1** ⌘ Current version: **3.1.0** ⌘

*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:	⌘	Introduction of UMTS800
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
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:	⌘	- Approved WI
Summary of change:	⌘	- Description regarding the requirement to R99 UE that supports UMTS800 is added. - Rev1 – Description regarding frequency band indicator is added to Signalling Requirement. The necessity is described in R2-032630(R4-031086) LS on Frequency band indicator.
Consequences if not approved:	⌘	- UMTS800 cannot be supported

Clauses affected:	⌘	Section 2, x				
Other specs affected:	⌘	**Y**	**N**		⌘	
		X		Other core specifications		25.331
			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

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downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 25.101 (Release 5, version 5): "UE Radio Transmission and Reception (FDD)".

[3] 3GPP TS 25.331 (Release 5, version 5): "Radio Resource Control Protocol".

[4] 3GPP TS 25.331 (Release '99, version 3): "Radio Resource Control Protocol".

[5] 3GPP TS 25.101 (Release '99, version 3): "UE Radio Transmission and Reception (FDD)".

[6] 3GPP TS 25.133 (Release '99, version 3): "Requirements for Support of Radio Resource Management (FDD)".

[7] 3GPP TS 25.133 (Release 5, version 5): "Requirements for Support of Radio Resource Management (FDD)".

[8] 3GPP TS25.331 (Release 6, version 6): "Radio Resource Control Protocol".

[9] 3GPP TS 25.101 (Release 6, version 6): "UE Radio Transmission and Reception (FDD)".

[10] 3GPP TS 25.133 (Release 6, version 6): "Requirements for Support of Radio Resource Management (FDD)".

X UMTS 800 Independent of Release

UMTS 800 is specified in Release 6 but is defined as a release-independent frequency band. This approach aligns the UMTS 800 band with other frequency bands when considering features that have to be supported in different releases.

x.1 UMTS 800 UE

UEs that conform to Release '99 and support the 800 MHz frequency band shall support the following requirements in Release 6

x.1.1 RF Requirements

The UE shall comply with the RF requirements for the 800 MHz band specified in [9]. These requirements are:

Section 5: Frequency bands and channel arrangement;

Section 6: Transmitter characteristics;

Section 7: Receiver characteristics.

Other requirements for radio reception and transmission requirements are defined in [5].

The UE shall comply with the Radio Resource Management requirements for the 800 MHz band specified in [10]. These requirements are:

Section 9.1: Measurement Performances for UE.

Other requirements for radio resource management are defined in [6].

x.1.2 Signalling Requirements

The UE shall support the following RRC extensions specified in [8]:

- The parameter value "UMTS800" for the IE "FDD frequency band" contained within the IEs "UE radio access capability extension" and "Measurement capability extension". The UE shall use this parameter value in order to signal its radio access capabilities relating to the 800 MHz band.

- The IE “Frequency band indicator” contained within the IEs “System Information Block type 5” and “System Information Block type 6”. The UE shall use this IE to determine whether it is compliant with the RF requirement in the indicated frequency band, in case the UE is in the frequency that belongs to multiple frequency bands.

NOTE: The UE must be able to at least decode any unrelated RRC extensions that can be included in between the release it supports, and the IE “Frequency band indicator”

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CHANGE REQUEST

⌘ **25.307** **CR** **008** ⌘**rev** **1** ⌘ Current version: **4.1.0** ⌘

*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:	⌘	Introduction of UMTS800
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
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:	⌘	- Approved WI
Summary of change:	⌘	- Description regarding the requirement to R99 UE that supports UMTS800 is added. - Rev1 – Description regarding frequency band indicator is added to Signalling Requirement. The necessity is described in R2-032630(R4-031086) LS on Frequency band indicator. Also, the existing text for Section 2 was taken from Rel-99 version of the specification, so this is replaced with text taken from the correct version of the specification (Rel-4)
Consequences if not approved:	⌘	- UMTS800 cannot be supported

Clauses affected:	⌘	Section 2, x

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	25.331
			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.

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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 25.101 (Release 5, version 5): "UE Radio Transmission and Reception (FDD)".

[3] 3GPP TS 25.331 (Release 5, version 5): "Radio Resource Control Protocol".

[4] 3GPP TS 25.331 (Release 4, version 4): "Radio Resource Control Protocol".

[5] 3GPP TS 25.101 (Release 4, version 4): "UE Radio Transmission and Reception (FDD)".

[6] 3GPP TS 25.133 (Release 4, version 4): "Requirements for Support of Radio Resource Management (FDD)".

[7] 3GPP TS 25.133 (Release 5, version 5): "Requirements for Support of Radio Resource Management (FDD)".

[8] 3GPP TS25.331 (Release 6, version 6): "Radio Resource Control Protocol".

[9] 3GPP TS 25.101 (Release 6, version 6): "UE Radio Transmission and Reception (FDD)".

[10] 3GPP TS 25.133 (Release 6, version 6): "Requirements for Support of Radio Resource Management (FDD)".

X UMTS 800 Independent of Release

UMTS 800 is specified in Release 6 but is defined as a release-independent frequency band. This approach aligns the UMTS 800 band with other frequency bands when considering features that have to be supported in different releases.

x.1 UMTS 800 UE

UEs that conform to Release '99 and support the 800 MHz frequency band shall support the following requirements in Release 6

x.1.1 RF Requirements

The UE shall comply with the RF requirements for the 800 MHz band specified in [9]. These requirements are:

Section 5: Frequency bands and channel arrangement;

Section 6: Transmitter characteristics;

Section 7: Receiver characteristics.

Other requirements for radio reception and transmission requirements are defined in [5].

The UE shall comply with the Radio Resource Management requirements for the 800 MHz band specified in [10]. These requirements are:

Section 9.1: Measurement Performances for UE.

Other requirements for radio resource management are defined in [6].

x.1.2 Signalling Requirements

The UE shall support the following RRC extensions specified in [8]:

- The parameter value "UMTS800" for the IE "FDD frequency band" contained within the IEs "UE radio access capability extension" and "Measurement capability extension". The UE shall use this parameter value in order to signal its radio access capabilities relating to the 800 MHz band.

- The IE “Frequency band indicator” contained within the IEs “System Information Block type 5” and “System Information Block type 6”. The UE shall use this IE to determine whether it is compliant with the RF requirement in the indicated frequency band, in case the UE is in the frequency that belongs to multiple frequency bands.

NOTE: The UE must be able to at least decode any unrelated RRC extensions that can be included in between the release it supports, and the IE “Frequency band indicator”

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CHANGE REQUEST

⌘ **25.307** **CR** **009** ⌘ **rev** **1** ⌘ Current version: **5.0.0** ⌘

*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:	⌘	Introduction of UMTS800
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
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:	⌘	- Approved WI
Summary of change:	⌘	- Description regarding the requirement to R99 UE that supports UMTS800 is added. - Rev1 – Description regarding frequency band indicator is added to Signalling Requirement. The necessity is described in R2-032630(R4-031086) LS on Frequency band indicator. Also, the existing text for Section 2 was taken from Rel-99 version of the specification, so this is replaced with text taken from the correct version of the specification (Rel-5)
Consequences if not approved:	⌘	- UMTS800 cannot be supported

Clauses affected:	⌘	Section 2, x

	Y	N			
Other specs affected: ⌘	X		Other core specifications	⌘	25.331
		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.

2 References

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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 25.101 (Release 5, version 5): "UE Radio Transmission and Reception (FDD)".

[3] 3GPP TS 25.133 (Release 5, version 5): "Requirements for Support of Radio Resource Management (FDD)".

[~~8~~4] 3GPP TS25.331 (Release 6, version 6): "Radio Resource Control Protocol".

[~~9~~5] 3GPP TS 25.101 (Release 6, version 6): "UE Radio Transmission and Reception (FDD)".

[~~10~~6] 3GPP TS 25.133 (Release 6, version 6): "Requirements for Support of Radio Resource Management (FDD)".

X UMTS 800 Independent of Release

UMTS 800 is specified in Release 6 but is defined as a release-independent frequency band. This approach aligns the UMTS 800 band with other frequency bands when considering features that have to be supported in different releases.

x.1 UMTS 800 UE

UEs that conform to Release '99 and support the 800 MHz frequency band shall support the following requirements in Release 6

x.1.1 RF Requirements

The UE shall comply with the RF requirements for the 800 MHz band specified in [~~9~~5]. These requirements are:

Section 5: Frequency bands and channel arrangement;

Section 6: Transmitter characteristics;

Section 7: Receiver characteristics.

Other requirements for radio reception and transmission requirements are defined in [~~5~~2].

The UE shall comply with the Radio Resource Management requirements for the 800 MHz band specified in [~~10~~6]. These requirements are:

Section 9.1: Measurement Performances for UE.

Other requirements for radio resource management are defined in [~~6~~3].

x.1.2 Signalling Requirements

The UE shall support the following RRC extensions specified in [84]:

- —The parameter value "UMTS800" for the IE "FDD frequency band" contained within the IEs "UE radio access capability extension" and "Measurement capability extension". The UE shall use this parameter value in order to signal its radio access capabilities relating to the 800 MHz band.

- The IE “Frequency band indicator” contained within the IEs “System Information Block type 5” and “System Information Block type 6”. The UE shall use this IE to determine whether it is compliant with the RF requirement in the indicated frequency band, in case the UE is in the frequency that belongs to multiple frequency bands.

NOTE: The UE must be able to at least decode any unrelated RRC extensions that can be included in between the release it supports, and the IE “Frequency band indicator”

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CHANGE REQUEST

⌘ **25.307** **CR** **010** ⌘ **rev** **-** ⌘ Current version: **5.0.0** ⌘

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

Title:	⌘	Introduction of UMTS800
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
Release:	⌘	Rel-6

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:	⌘	- Approved WI
Summary of change:	⌘	- The section X is added. The section "X. UMTS 800 Independent of Release" that describes the requirement to R99 UE that supports UMTS800 is added by the CRs 007, 008(shadow) and 009(shadow) to the R99, Rel-4 and Rel-5 specifications respectively. Since UMTS 800 is specified in Release 6, the description of the section X becomes unnecessary in the Rel-6 specification. Therefore the section is replaced with Void.
Consequences if not approved:	⌘	- UMTS800 cannot be supported

Clauses affected:	⌘	Section X

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	25.331
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	As version6.x.x of 25.307 has not been created, this CR is made based on v.5.0.0.

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X Void

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CHANGE REQUEST

⌘ **25.331** **CR** **2133** ⌘ **rev** **-** ⌘ Current version: **5.6.0** ⌘

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

Title:	⌘	Introduction of UMTS800
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
Release:	⌘	Rel-6

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:	⌘	- Approved WI
Summary of change:	⌘	- UMTS800 is added to as a one of the frequency bands to UE capability
Consequences if not approved:	⌘	- UMTS800 cannot be supported

Clauses affected:	⌘	10.3.3.21a, 10.3.3.42a, 11.3

Other specs affected:	Y	N			
⌘	X		Other core specifications	⌘	25.307
		X	Test specifications		
		X	O&M Specifications		

Other comments:	⌘	As version6.x.x of 25.331 has not been created, this CR is made based on v.5.6.0.

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.

10.3.3.21a Measurement capability extension

This IE may be used to replace the measurement capability information provided within IE "Measurement capability".

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
FDD measurements	MP	1 to <maxFreqBands FDD>			
>FDD Frequency band	MD		Enumerated(FDD2100, FDD1900,	The default value is the same as indicated in the IE "Frequency band" included in the IE " UE radio access capability extension". Four~~Five~~ spare values are needed	
			FDD1800 ~~)~~		REL-5
			FDD800)		REL-6
>Need for DL compressed mode	MP		Boolean	TRUE means that the UE requires DL compressed mode in order to perform measurements on the FDD frequency band indicated by the IE "FDD Frequency band"	
>Need for UL compressed mode	MP		Boolean	TRUE means that the UE requires UL compressed mode in order to perform measurements on the FDD frequency band indicated by the IE "FDD Frequency band"	
TDD measurements	CV-*tdd_sup*	1 to <maxFreqBands TDD>			
>TDD Frequency band	MP		Enumerated(a, b, c)		
>Need for DL compressed mode	MP		Boolean	TRUE means that the UE requires DL compressed mode in order to perform measurements on TDD frequency band indicated by the IE "TDD Frequency band"	
>Need for UL compressed mode	MP		Boolean	TRUE means that the UE requires UL compressed mode in order to perform measurements on TDD frequency band indicated by the IE "TDD Frequency band"	
GSM measurements	CV-*gsm_sup*	1 to <maxFreqBands GSM>			

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
>GSM Frequency band	MP		Enumerated(GSM450, GSM480, GSM850, GSM900P, GSM900E, GSM1800, GSM1900)	as defined in [45]. Nine spare values are needed.	
>Need for DL compressed mode	MP		Boolean	TRUE means that the UE requires DL compressed mode in order to perform measurements on GSM frequency band indicated by the IE "GSM Frequency band"	
>Need for UL compressed mode	MP		Boolean	TRUE means that the UE requires UL compressed mode in order to perform measurements on GSM frequency band indicated by the IE "GSM Frequency band"	
Multi-carrier measurement	CV-*mc_sup*				
>Need for DL compressed mode	MP		Boolean	TRUE means that the UE requires DL compressed mode in order to perform measurements on multi-carrier	
>Need for UL compressed mode	MP		Boolean	TRUE means that the UE requires UL compressed mode in order to perform measurements on multi-carrier	

Condition	Explanation
tdd_sup	The IE is mandatory present if the IE "Multi-mode capability" has the value "TDD" or "FDD/TDD". Otherwise this field is not needed in the message.
gsm_sup	The IE is mandatory present if the IE "Support of GSM" has the value TRUE. Otherwise this field is not needed in the message.
mc_sup	The IE is mandatory present if the IE "Support of multi-carrier" has the value TRUE. Otherwise this field is not needed in the message.

10.3.3.42a UE radio access capability extension

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Frequency band specific capability list	MP	1 to <maxFreqbandsFDD>			
>Frequency band	MP		Enumerated(FDD2100, FDD1900,	FourFive spare values are needed	
			FDD1800)		REL-5
			FDD800)		REL-6
>RF capability FDD extension	MD		RF capability FDD extension 10.3.3.33a	the default values are the same values as in the immediately preceding IE "RF capability FDD extension"; the first occurrence is MP	
>Measurement capability extension	MP		Measurement capability extension 10.3.3.21a		

11.3 Information element definitions

```
RadioFrequencyBandFDD ::=           ENUMERATED {
                                        fdd2100,
                                        fdd1900,
                                        fdd1800,
                                        fdd800spare5, spare4, spare3, spare2, spare1 }
```

3GPP TSG-RAN WG2 Meeting #39
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Tdoc ⌘R2-032725

CR-Form-v7

CHANGE REQUEST

⌘ **25.331** **CR** **2160** ⌘**rev** **-** ⌘ Current version: **5.6.0** ⌘

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

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

Title:	⌘	Introduction of new bands
Source:	⌘	RAN WG2
Work item code:	⌘	RinImp-UMTS800
Date:	⌘	11/20/03
Category:	⌘	**B**
Release:	⌘	Rel-6

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:	⌘	As pointed out in R2-032668, it is not possible from the UE to determine it is in one frequency band or another, when it tries to camp on certain frequency belongs to multiple frequency bands that have same duplex distance, such as Band V and Band VI. Therefore, it is possible, for example, the UE that only satisfy RF requirement for Band V can initiate a call from that a cell in Band VI whose frequency can belong to Band Vor VI. This is unacceptable when these bands have different RF requirements.
Summary of change:	⌘	The IE "Frequency band indicator" is added to System Information type 5, and system information type 6, as well as procedure description. When the IE is included into SIB type 5 and type 6, the UE shall compare the value with its capabilities, and if it is not the band it supports, the UE shall condider the cell to be barred. Note: This feature is introduced for any frequency bands, not limited to UMTS800.
Consequences if not approved:	⌘	The UE that is not compliant with the RF requirement in certain frequency band can initiate a call from that frequency.

Clauses affected:	⌘	8.1.1.6.5, 8.1.1.6.6, 10.2.48.8.8, 10.2.48.8.9, 10.3.6.x, 11.3			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	25.307
		[X] / [ ]	Other core specifications		
		[ ] / [X]	Test specifications		
		[ ] / [X]	O&M Specifications		
Other comments:	⌘	As version6.x.x of 25.331 has not been created, this CR is made based on v.5.6.0.			

How to create CRs using this form:

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

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

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

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

8.1.1.6.5 System Information Block type 5

The UE should store all relevant IEs included in this system information block. The UE shall:

1> if the IE "Frequency band indicator" is included:

2> if the frequency band indicated in the IE is not part of the frequency bands supported in the UE radio access capability:

3> consider the cell to be barred according to [4]; and

3> consider the barred cell as using the value "not allowed" in the IE "Intra-frequency clel re-selection indicator," and the maximum value in the IE "T_{barred}"

1> if in connected mode, and System Information Block type 6 is indicated as used in the cell:

2> read and act on information sent in System Information Block type 6.

1> replace the TFS of the RACH with the one stored in the UE if any;

1> let the physical channel(s) of type PRACH given by the IE(s) "PRACH info" be the default in uplink for the PRACH if UE is in CELL_FACH state;

1> start to receive the physical channel of type AICH using the parameters given by the IE "AICH info" (FDD only) when given allocated PRACH is used;

1> use the first instance of the list of transport formats as in the IE "RACH TFS" for the used RACH received in the IE "PRACH system information list" when using the CCCH;

1> replace the TFS of the FACH/PCH with the one stored in the UE if any;

1> select a Secondary CCPCH as specified in [4] and in subclause 8.5.19, and start to receive the physical channel of type PICH associated with the PCH carried by the selected Secondary CCPCH using the parameters given by the IE "PICH info" if UE is in Idle mode or in CELL_PCH or URA_PCH state;

1> start to monitor its paging occasions on the selected PICH if UE is in Idle mode or in CELL_PCH or URA_PCH state;

1> start to receive the selected physical channel of type Secondary CCPCH using the parameters given by the IE(s) "Secondary CCPCH info" if UE is in CELL_FACH state;

1> in 3.84 Mcps TDD:

2> use the IE "TDD open loop power control" as defined in subclause 8.5.7 when allocated PRACH is used.

1> in TDD:

2> if the IE "PDSCH system information" and/or the IE "PUSCH system information" is included:

3> store each of the configurations given there with the associated identity given in the IE "PDSCH Identity" and/or "PUSCH Identity" respectively. For every configuration, for which the IE "SFN Time info" is included, the information shall be stored for the duration given there.

8.1.1.6.6 System Information Block type 6

If in connected mode, the UE should store all relevant IEs included in this system information block. The UE shall:

1> if the IE "Frequency band indicator" is included:

2> if the frequency band indicated in the IE is not part of the frequency bands supported in the UE radio access capability:

3> consider the cell to be barred according to [4]; and

3> consider the barred cell as using the value “not allowed” in the IE “Intra-frequency clel re-selection indicator,” and the maximum value in the IE “T_{barred}”

1> replace the TFS of the RACH with the one stored in the UE if any;

1> let the physical channel(s) of type PRACH given by the IE(s) "PRACH info" be the default in uplink if UE is in CELL_FACH state. If the IE "PRACH info" is not included, the UE shall read the corresponding IE(s) in System Information Block type 5 and use that information to configure the PRACH;

1> start to receive the physical channel of type AICH using the parameters given by the IE "AICH info" when associated PRACH is used. If the IE "AICH info" is not included, the UE shall read the corresponding IE in System Information Block type 5 and use that information (FDD only);

1> replace the TFS of the FACH/PCH with the one stored in the UE if any;

1> select a Secondary CCPCH as specified in [4] and in subclause 8.5.19, and start to receive the physical channel of type PICH associated with the PCH carried by the selected Secondary CCPCH using the parameters given by the IE "PICH info" if the UE is in CELL_PCH or URA_PCH state. If the IE "PICH info" is not included, the UE shall read the corresponding IE in System Information Block type 5 and use that information;

1> start to monitor its paging occasions on the selected PICH if the UE is in CELL_PCH or URA_PCH state;

1> start to receive the selected physical channel of type Secondary CCPCH using the parameters given by the IE(s) "Secondary CCPCH info" if the UE is in CELL_FACH state. If the IE "Secondary CCPCH info" is not included, the UE shall read the corresponding IE(s) in System Information Block type 5 and use that information;

1> in 3.84 Mcps TDD: use the IE "TDD open loop power control" as defined in subclause 8.5.7;

1> in TDD: if the IE "PDSCH system information" and/or the IE "PUSCH system information" is included, store each of the configurations given there with the associated identity given in the IE "PDSCH Identity" and/or "PUSCH Identity" respectively. For every configuration, for which the IE "SFN Time info" is included, the information shall be stored for the duration given there.

If in idle mode, the UE shall not use the values of the IEs in this system information block.

10.2.48.8.8 System Information Block type 5

The system information block type 5 contains parameters for the configuration of the common physical channels in the cell.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
SIB6 Indicator	MP		Boolean	TRUE indicates that SIB6 is broadcast in the cell.	
PhyCH information elements					
PICH Power offset	MP		PICH Power offset 10.3.6.50		
CHOICE *mode*	MP				
>FDD					
>>AICH Power offset	MP		AICH Power offset 10.3.6.3	This AICH Power offset also indicates the power offset for AP-AICH and for CD/CA-ICH.	
>TDD					
>>PUSCH system information	OP		PUSCH system information 10.3.6.66		
>>PDSCH system information	OP		PDSCH system information		

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
			10.3.6.46		
>>TDD open loop power control	MP		TDD open loop power control 10.3.6.79		
Primary CCPCH info	OP		Primary CCPCH info 10.3.6.57	Note 1	
PRACH system information list	MP		PRACH system information list 10.3.6.55		
Secondary CCPCH system information	MP		Secondary CCPCH system information 10.3.6.72		
CBS DRX Level 1 information	CV-*CTCH*		CBS DRX Level 1 information 10.3.8.3		
Frequency band indicator	OP		Frequency band indicator 10.3.6.x		REL-6

NOTE 1: DL scrambling code of the Primary CCPCH is the same as the one for Primary CPICH (FDD only).

Condition	Explanation
CTCH	The IE is mandatory present if the IE "CTCH indicator" is equal to TRUE for at least one FACH, otherwise the IE is not needed in the message

10.2.48.8.9 System Information Block type 6

The system information block type 6 contains parameters for the configuration of the common and shared physical channels to be used in connected mode.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
PhyCH information elements					
PICH Power offset	MP		PICH Power offset 10.3.6.50		
CHOICE *mode*	MP				
>FDD					
>>AICH Power offset	MP		AICH Power offset 10.3.6.3	This AICH Power offset also indicates the power offset for AP-AICH and for CD/CA-ICH.	
>TDD					
>>PUSCH system information	OP		PUSCH system information 10.3.6.66		
>>PDSCH system information	OP		PDSCH system information 10.3.6.46		
>>TDD open loop power control	MP		TDD open loop power		

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
			control 10.3.6.79		
Primary CCPCH info	OP		Primary CCPCH info 10.3.6.57	Note 1	
PRACH system information list	OP		PRACH system information list 10.3.6.55		
Secondary CCPCH system information	OP		Secondary CCPCH system information 10.3.6.72		
CBS DRX Level 1 information	CV-*CTCH*		CBS DRX Level 1 information 10.3.8.3		
Frequency band indicator	OP		Frequency band indicator 10.3.6.x		REL-6

NOTE 1: DL scrambling code of the Primary CCPCH is the same as the one for Primary CPICH (FDD only).

Condition	Explanation
CTCH	The IE is mandatory present if the IE "CTCH indicator" is equal to TRUE for at least one FACH, otherwise the IE is not needed

10.3.6.x Frequency band indicator

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Frequency band indicator	MP		Enumerated(FDD2100, FDD1900, FDD1800, FDD800)	Four spare values are needed	REL-6

11.3 Information element definitions

```
SysInfoType5 ::=                    SEQUENCE {
        sib6indicator                   BOOLEAN,
    -- Physical channel IEs
        pich-PowerOffset                PICH-PowerOffset,
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                aich-PowerOffset                AICH-PowerOffset
            },
            tdd                             SEQUENCE {
    -- If PDSCH/PUSCH is configured for 1.28Mcps TDD, the following IEs should be absent
    --   and the info included in the tdd128SpecificInfo instead.
    -- If PDSCH/PUSCH is configured for 3.84Mcps TDD in R5, HCR-r5-SpecificInfo should also be
    -- included.
                pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN       OPTIONAL,
                pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN       OPTIONAL,
                openLoopPowerControl-TDD        OpenLoopPowerControl-TDD
            }
        },
        primaryCCPCH-Info               PrimaryCCPCH-Info                   OPTIONAL,
        prach-SystemInformationList     PRACH-SystemInformationList,
        sCCPCH-SystemInformationList    SCCPCH-SystemInformationList,
```

```
        -- cbs-DRX-Level1Information is conditional on any of the CTCH indicator IEs in
        -- sCCPCH-SystemInformationList
        cbs-DRX-Level1Information       CBS-DRX-Level1Information           OPTIONAL,
    -- Extension mechanism for non- release99 information
        v4xyNonCriticalExtensions       SEQUENCE {
            sysInfoType5-v4xyext            SysInfoType5-v4xyext-IEs        OPTIONAL,
        -- Extension mechanism for non- rel-4 information
            v5xyNonCriticalExtensions   SEQUENCE {
                sysInfoType5-v5xyext            SysInfoType5-v5xyext-IEs        OPTIONAL,
                v6xyNonCriticalExtensions       SEQUENCE {
                    sysInfoType5-v6xyext            SysInfoType5-v6xyext-IEs        OPTIONAL,
                    nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType5-v6xyext-IEs::= SEQUENCE {
        frequencyBandIndicator          RadioFrequencyBandFDD
}


SysInfoType6 ::=                    SEQUENCE {
    -- Physical channel IEs
        pich-PowerOffset                PICH-PowerOffset,
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                aich-PowerOffset                AICH-PowerOffset,
                -- dummy is not used in this version of specification, it should
                -- not be sent and if received it should be ignored.
                dummy                           CSICH-PowerOffset           OPTIONAL
            },
            tdd                             SEQUENCE {
                -- If PDSCH/PUSCH is configured for 1.28Mcps TDD, pusch-SysInfoList-SFN,
                -- pdsch-SysInfoList-SFN and openLoopPowerControl-TDD should be absent
                -- and the info included in the tdd128SpecificInfo instead.
                -- If PDSCH/PUSCH is configured for 3.84Mcps TDD in R5, HCR-r5-SpecificInfo should
                -- also be included.
                pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN       OPTIONAL,
                pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN       OPTIONAL,
                openLoopPowerControl-TDD        OpenLoopPowerControl-TDD
            }
        },
        primaryCCPCH-Info               PrimaryCCPCH-Info                   OPTIONAL,
        prach-SystemInformationList     PRACH-SystemInformationList         OPTIONAL,
        sCCPCH-SystemInformationList    SCCPCH-SystemInformationList        OPTIONAL,
        cbs-DRX-Level1Information       CBS-DRX-Level1Information           OPTIONAL,
        -- Conditional on any of the CTCH indicator IEs in
        -- sCCPCH-SystemInformationList
    -- Extension mechanism for non- release99 information
        v4xyNonCriticalExtensions       SEQUENCE {
            sysInfoType6-v4xyext            SysInfoType6-v4xyext-IEs        OPTIONAL,
        -- Extension mechanism for non- rel-4 information
            v5xyNonCriticalExtensions   SEQUENCE {
                sysInfoType6-v5xyext            SysInfoType6-v5xyext-IEs        OPTIONAL,
                v6xyNonCriticalExtensions       SEQUENCE {
                    sysInfoType6-v6xyext            SysInfoType6-v6xyext-IEs        OPTIONAL,
                    nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType5-v6xyext-IEs::= SEQUENCE {
        frequencyBandIndicator          RadioFrequencyBandFDD
}
```