Title:　　　　　**Frequency band alignment with TS 25.101**

Source:　　　　**TSG-RAN WG2**

Agenda item:　　**7.3.5, 8.1.2, 8.10**

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Workitem
25.307	015	1	Rel-5	Frequency band alignment with 25.101	A	5.1.0	5.2.0	R2-040349	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900
25.307	016	1	Rel-6	Frequency band alignment with 25.101	A	6.0.0	6.1.0	R2-040350	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900
25.307	017	-	R99	Frequency band alignment with 25.101	F	3.2.0	3.3.0	R2-040346	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900
25.307	018	-	Rel-4	Frequency band alignment with 25.101	A	4.2.0	4.3.0	R2-040347	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900
25.331	2228	-	Rel-5	Frequency band alignment with 25.101	F	5.7.1	5.8.0	R2-040263	Rinimp-UMTS1721, Rinimp-UMTS1900, Rinimp-UMTS1800
25.331	2229	-	Rel-6	Frequency band alignment with 25.101	F	6.0.1	6.1.0	R2-040264	Rinimp-UMTS1721, Rinimp-UMTS1900, Rinimp-UMTS1800, Rinimp-UMTS800

<div style="text-align:right">CR-Form-v7</div>

CHANGE REQUEST

| ⌘ | **25.307** CR | **015** | ⌘**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 ☐ Core Network ☐

Title: ⌘	Frequency band alignment with 25.101	
Source: ⌘	RAN WG2	
Work item code: ⌘	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900	***Date:*** ⌘ 15/01/2004

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 identification of the FDD operating bands used within 25.307 is not consistent with the numbering used within 25.101. As new bands are added this is likely to cause mis-interpretation of the specifications.
Summary of change: ⌘	The terms 2100, 1900, 1800, and 800 are replaced with Band I, Band II, Band III and Band VI. **Isolated Impact Analysis** Functionality corrected: FDD frequency band identification Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved: ⌘	25.307 will not be consistent with 25.101 with regard to the identification of FDD operating bands.

Clauses affected: ⌘	1, 6, 6.1, 6.1.1, 6.1.2

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

Other comments: ⌘	

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ 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.

1 Scope

The present document specifies requirements on UEs supporting a frequency band that is independent of release. TSG-RAN has agreed that the standardisation of new frequency bands may be independent of a release. However, in order to implement a UE that conforms to a particular release but supports a band of operation that is specified in a later release, it is necessary to specify some extra requirements.

For example, ~~UMTS 1800~~Band III is contained in the Release 5 specifications. In order to implement a UE conforming to Release '4 but supporting ~~the 1800 MHz band~~Band III, it is necessary for the UE to additionally conform to some parts of the Release 5 specifications, such as the radio frequency requirements for the ~~1800 MHz band~~Band III and some signalling extensions relating to the UE radio access capabilities.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

6 ~~UMTS 800~~Band VI Independent of Release

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

6.1 ~~UMTS 800~~Band VI UE

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

6.1.1 RF Requirements

The UE shall comply with the RF requirements for ~~the 800 MHz band~~Band VI 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 [2].

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

Section 9.1: Measurement Performances for UE.

Other requirements for radio resource management are defined in [7].

6.1.2 Signalling Requirements

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

- The parameter value "~~UMTS800~~Band VI" 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~~Band VI.

- 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 **016** ⌘rev **1** ⌘ Current version: **6.0.0** ⌘

*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 ☐ Core Network ☐

Title: ⌘	Frequency band alignment with 25.101	

Source: ⌘	RAN WG2

Work item code:⌘	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900	***Date:*** ⌘	15/01/2004

Category: ⌘	**A**	***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: ⌘	The identification of the FDD operating bands used within 25.307 is not consistent with the numbering used within 25.101. As new bands are added this is likely to cause mis-interpretation of the specifications.	

Summary of change:⌘	The terms 2100, 1900, 1800, and 800 are replaced with Band I, Band II, Band III and Band VI. **Isolated Impact Analysis** Functionality corrected: FDD frequency band identification Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Consequences if ⌘ ***not approved:***	25.307 will not be consistent with 25.101 with regard to the identification of FDD operating bands.

Clauses affected: ⌘	1	

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

Other comments: ⌘	

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ 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.

1 Scope

The present document specifies requirements on UEs supporting a frequency band that is independent of release. TSG-RAN has agreed that the standardisation of new frequency bands may be independent of a release. However, in order to implement a UE that conforms to a particular release but supports a band of operation that is specified in a later release, it is necessary to specify some extra requirements.

For example, ~~UMTS 1800~~Band III is contained in the Release 5 specifications. In order to implement a UE conforming to Release '4 but supporting ~~the 1800 MHz band~~Band III, it is necessary for the UE to additionally conform to some parts of the Release 5 specifications, such as the radio frequency requirements for the ~~1800 MHz band~~Band III and some signalling extensions relating to the UE radio access capabilities.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.307** CR **017** | ⌘ **rev** | **-** | ⌘ | Current version: | **3.2.0** | ⌘ |

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

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

Title: ⌘	Frequency band alignment with 25.101	
Source: ⌘	RAN WG2	
Work item code:⌘	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900	**Date:** ⌘ 15/01/2004
Category: ⌘ **F**	Use <u>one</u> of the following categories: **F** (correction) **A** (corresponds to a correction in an earlier release) **B** (addition of feature), **C** (functional modification of feature) **D** (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.	**Release:** ⌘ R99 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change: ⌘	The identification of the FDD operating bands used within 25.307 is not consistent with the numbering used within 25.101v5 onwards. As new bands are added this is likely to cause mis-interpretation of the specifications.
Summary of change:⌘	The terms 2100, 1900, 1800, and 800 are replaced with Band I, Band II, Band III and Band VI. **Isolated Impact Analysis** Functionality corrected: FDD frequency band identification Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if ⌘ **not approved:**	25.307 will not be consistent with 25.101 with regard to the identification of FDD operating bands.

Clauses affected: ⌘	1, 4, 4.1, 4.1.1, 4.1.2, 5, 5.1, 5.1.1, 5.1.2, 6, 6.1, 6.1.1, 6.1.2

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

Other comments: ⌘	

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ 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.

1 Scope

The present document specifies requirements on UEs supporting a frequency band that is independent of release. TSG-RAN has agreed that the standardisation of new frequency bands may be independent of a release. However, in order to implement a UE that conforms to a particular release but supports a band of operation that is specified in a later release, it is necessary to specify some extra requirements.

For example, ~~UMTS 1800~~Band III is contained in the Release 5 specifications. In order to implement a UE conforming to Release '4 but supporting ~~the 1800 MHz band~~Band III, it is necessary for the UE to additionally conform to some parts of the Release 5 specifications, such as the radio frequency requirements for the ~~1800 MHz band~~Band III and some signalling extensions relating to the UE radio access capabilities.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

4 ~~UMTS 1800~~Band III Independent of Release

~~UMTS 1800~~Band III is specified in Release 5 but is defined as a release-independent frequency band. This approach aligns ~~the UMTS 1800 band~~Band III with other frequency bands when considering features that have to be supported in different releases.

4.1 ~~UMTS 1800~~Band III UE

UEs that conform to Release '99 and support ~~the 1800 MHz frequency band~~Band III shall support the following requirements in Release 5.

4.1.1 RF Requirements

The UE shall comply with the RF requirements for ~~the 1800 MHz band~~Band III specified in [2]. 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 1800 MHz band~~Band III specified in [7]. These requirements are:

Section 9.1: Measurement Performances for UE.

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

4.1.2 Signalling Requirements

The UE shall support the following RRC extensions specified in [3]:

- The parameter value "~~UMTS1800~~Band III" 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 1800 MHz band~~Band III.

5 ~~UMTS 1900~~Band II Independent of Release

~~UMTS 1900~~Band II is specified in Release 5 but is defined as a release-independent frequency band. This approach aligns ~~the UMTS 1900~~Band II ~~band~~ with other frequency bands when considering features that have to be supported in different releases.

5.1 ~~UMTS 1900~~Band II UE

UEs that conform to Release '99 and support ~~the 1900 MHz frequency band~~Band II shall support the following requirements in Release 5

5.1.1 RF Requirements

The UE shall comply with the RF requirements for ~~the 1900 MHz band~~Band II specified in [2]. 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 1900 MHz band~~Band II specified in [7]. These requirements are:

Section 9.1: Measurement Performances for UE.

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

5.1.2 Signalling Requirements

Release '99 contains the necessary signalling for ~~the 1900 MHz frequency band~~Band II [4].

6 ~~UMTS 800~~Band VI Independent of Release

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

6.1 ~~UMTS 800~~Band VI UE

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

6.1.1 RF Requirements

The UE shall comply with the RF requirements for ~~the 800 MHz band~~Band VI 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~~Band VI specified in [10]. These requirements are:

Section 9.1: Measurement Performances for UE.

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

6.1.2 Signalling Requirements

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

- The parameter value "~~UMTS800~~Band VI" 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~~Band VI.

- 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 | **018** | ⌘**rev** | **-** | ⌘ | Current version: | **4.2.0** | ⌘ |

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

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

Title: ⌘	Frequency band alignment with 25.101	
Source: ⌘	RAN WG2	
Work item code:⌘	Rinimp-UMTS1721, Rinimp-UMTS1800, Rinimp-UMTS1900	**Date:** ⌘ 15/01/2004

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 identification of the FDD operating bands used within 25.307 is not consistent with the numbering used within 25.101v5 onwards. As new bands are added this is likely to cause mis-interpretation of the specifications.
Summary of change:⌘	The terms 2100, 1900, 1800, and 800 are replaced with Band I, Band II, Band III and Band VI. **Isolated Impact Analysis** Functionality corrected: FDD frequency band identification Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved: ⌘	25.307 will not be consistent with 25.101 with regard to the identification of FDD operating bands.

Clauses affected: ⌘	1, 4, 4.1, 4.1.1, 4.1.2, 5, 5.1, 5.1.1, 5.1.2, 6, 6.1, 6.1.1, 6.1.2

		Y	N		
Other specs affected:	⌘	☐	☐	Other core specifications ⌘	
		☐	☐	Test specifications	
		☐	☐	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.

1 Scope

The present document specifies requirements on UEs supporting a frequency band that is independent of release. TSG-RAN has agreed that the standardisation of new frequency bands may be independent of a release. However, in order to implement a UE that conforms to a particular release but supports a band of operation that is specified in a later release, it is necessary to specify some extra requirements.

For example, ~~UMTS 1800~~Band III is contained in the Release 5 specifications. In order to implement a UE conforming to Release '4 but supporting ~~the 1800 MHz band~~Band III, it is necessary for the UE to additionally conform to some parts of the Release 5 specifications, such as the radio frequency requirements for the ~~1800 MHz band~~Band III and some signalling extensions relating to the UE radio access capabilities.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

# 4	~~UMTS 1800~~ Band III Independent of Release

UMTS 1800 is specified in Release 5 but is defined as a release-independent frequency band. This approach aligns the UMTS 1800 band with other frequency bands when considering features that have to be supported in different releases.

## 4.1	~~UMTS 1800~~Band III UE

UEs that conform to Release 4 and support ~~the 1800 MHz frequency band~~Band III shall support the following requirements in Release 5.

### 4.1.1	RF Requirements

The UE shall comply with the RF requirements ~~for the 1800 MHz band~~Band III specified in [2]. 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 1800 MHz band~~Band III specified in [7]. These requirements are:

Section 9.1:	Measurement Performances for UE.

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

### 4.1.2	Signalling Requirements

The UE shall support the following RRC extensions specified in [3]:

- The parameter value "~~UMTS1800~~Band III" 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 1800 MHz band~~Band III.

# 5	~~UMTS 1900~~Band II Independent of Release

~~UMTS 1900~~Band II is specified in Release 5 but is defined as a release-independent frequency band. This approach aligns ~~the UMTS 1900 band~~Band II with other frequency bands when considering features that have to be supported in different releases.

## 5.1	~~UMTS 1900~~Band II UE

UEs that conform to Release 4 and support ~~the 1900 MHz frequency band~~Band II shall support the following requirements in Release 5

### 5.1.1	RF Requirements

The UE shall comply with the RF requirements for ~~the 1900 MHz band~~Band II specified in [2]. 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 1900 MHz band~~Band II specified in [7]. These requirements are:

Section 9.1:   Measurement Performances for UE.

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

5.1.2   Signalling Requirements

Release 4 contains the necessary signalling for ~~the 1900 MHz frequency band~~Band II [4].

6   ~~UMTS 800~~Band VI Independent of Release

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

6.1   ~~UMTS 800~~Band VI UE

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

6.1.1   RF Requirements

The UE shall comply with the RF requirements for ~~the 800 MHz band~~Band VI 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~~Band VI specified in [10]. These requirements are:

Section 9.1:   Measurement Performances for UE.

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

6.1.2   Signalling Requirements

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

-    The parameter value "~~UMTS800~~Band VI" 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~~Band VI.

-    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".

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.331** CR **2228** | ⌘**rev** | **-** | ⌘ | Current version: | **5.7.1** | ⌘ |

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

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

Title: ⌘	Frequency band alignment with 25.101	

Source: ⌘	RAN WG2	

Work item code:⌘	Rinimp-UMTS1721, Rinimp-UMTS1900, Rinimp-UMTS1800	**Date:** ⌘	15/01/2004

Category: ⌘	**F**	**Release:** ⌘	Rel-5

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

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

Reason for change: ⌘	The identification of the FDD operating bands used within 25.331 is not consistent with the numbering used within 25.101. As new bands are added this is likely to cause mis-interpretation of the specifications.

Summary of change:⌘	The terms 2100, 1900, and 1800 are replaced with Band I, Band II and Band III.

The IE names within the ASN.1 are not changed in order to maintain compatibility with release 99, but a comment is added to describe how the IE names map to the band numbering of 25.101.

Isolated Impact Analysis
Functionality corrected: FDD frequency band identification

Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Consequences if not approved: ⌘	25.331 will not be consistent with 25.101 with regard to the identification of FDD operating bands.

Clauses affected: ⌘	8.1.16.3, 8.6.3.12, 10.3.3.21a, 10.3.3.42a, 11.3

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

Other comments: ⌘

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ 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.

8.1.16.3 INTER RAT HANDOVER INFO message contents to set

The UE shall:

1> include the IE "UE security information"; and

1> not include the IE "UE Specific Behaviour Information 1 interRAT".

1> in case support for the compressed version of the inter RAT handover info is indicated via the other radio access technology:

2> in case the other radio access technology indicates the number of pre-defined configurations mandatory to report:

3> omit reporting (some) of the pre-defined configurations beyond the number indicated by the other radio access technology if this makes the INTER RAT HANDOVER INFO message size optimised for the other radio access technology.

NOTE: In case of GSM, the omission of pre-defined configurations applies in case it makes the message fit within one LapDm segment on the radio interface.

2> include of the following IEs the IE that after encoding has the smallest size: IE "Predefined configuration status information compressed" or the IE "Predefined configuration status information";

2> include the IE "UE radio access capability compressed".

1> else:

2> include the IE "Predefined configuration status information";

2> 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:

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

3> if the UE supports a single UTRA FDD Frequency Band different from Band I [21]2100 MHz:

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

4> 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".

3> else:

4> include the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the Band I [21]2100 MHz UTRA FDD frequency band;

4> 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 following in the variable INTER_RAT_HANDOVER_INFO_TRANSFERRED if they were included in the INTER RAT HANDOVER INFO message:

2> the IE "Predefined configuration status information";

2> the IE "UE security information";

2> the IE "UE radio access capability";

2> the IE "UE radio access capability extension"; and

2> the IE "UE radio access capability compressed".

1> and the procedure ends.

2> the IE "UE radio access capability compressed".

1> and the procedure ends.

## 8.6.3.12	Capability Update Requirement

If the IE "Capability Update Requirement" is included the UE shall:

1> if the IE "UE radio access FDD capability update requirement" has the value TRUE:

2> if the UE supports FDD mode:

3> store its UTRA FDD capabilities and its UTRA capabilities common to FDD and TDD in the IE "UE radio access capability" and the IE "UE radio access capability extension" in variable UE_CAPABILITY_REQUESTED as specified below:

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

4> if the UE supports a single UTRA FDD Frequency Band different from ~~2100 MHz~~Band I [21]:

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

5> store 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".

4> else:

5> store the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the Band I [21]~~2100 MHz UTRA FDD frequency band~~.

1> if the IE "UE radio access 3.84 Mcps TDD capability update requirement" has the value TRUE:

2> if the UE supports 3.84 Mcps TDD mode:

3> store its UTRAN-specific 3.84 Mcps TDD capabilities and its UTRAN–specific capabilities common to FDD and TDD in the variable UE_CAPABILITY_REQUESTED.

1> if the IE "UE radio access 1.28 Mcps TDD capability update requirement" has the value TRUE:

2> if the UE supports 1.28 Mcps TDD mode:

3> store its UTRAN-specific 1.28 Mcps TDD capabilities and its UTRAN–specific capabilities common to FDD and TDD in the variable UE_CAPABILITY_REQUESTED.

1> if the IE "System specific capability update requirement list" is present:

2> for each of the RAT requested in the IE "UE system specific capability"

3> if the UE supports the listed RAT:

4> include its inter-RAT radio access capabilities for the listed RAT in the IE "UE system specific capability" from the variable UE_CAPABILITY_REQUESTED.

If the IE " Capability update requirement " is not present, the UE shall:

1> assume the default values as specified in subclause 10.3.3.2 and act in accordance with the above.

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 <maxFreqBandsFDD>			
>FDD Frequency band	MD		Enumerated(~~FDD2100~~Band I, ~~FDD1900~~Band II,	The default value is the same as indicated in the IE "Frequency band" included in the IE " UE radio access capability extension". <u>Band numbering is defined in [21].</u> Five spare values are needed	
			~~FDD1800~~Band III)		REL-5
>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 <maxFreqBandsTDD>			
>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 <maxFreqBandsGSM>			

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~~Band I, ~~FDD1900~~Band II,	Band numbering is defined in [21] Five spare values are needed	
			~~FDD1800~~Band III)		REL-5
>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 correspond to Band I, Band II and Band III respectively
                                    fdd2100,
                                    fdd1900,
                                    fdd1800, spare5, spare4, spare3, spare2, spare1 }

RF-CapabBandListFDDComp::=  SEQUENCE (SIZE (1..maxFreqBandsFDD)) OF
    -- the first entry corresponds with the first value of IE RadioFrequencyBandFDD,
    -- fdd2100, and so on
    RF-CapabBandFDDComp
```

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.331** CR **2229** | ⌘**rev** | **-** | ⌘ | Current version: | **6.0.1** | ⌘ |

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

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

Title: ⌘	Frequency band alignment with 25.101	
Source: ⌘	RAN WG2	
Work item code:⌘	Rinimp-UMTS1721, Rinimp-UMTS1900, Rinimp-UMTS1800, Rinimp-UMTS800	**Date:** ⌘ 15/01/2004

Category: ⌘	**F**	**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: ⌘	The identification of the FDD operating bands used within 25.331 is not consistent with the numbering used within 25.101. As new bands are added this is likely to cause mis-interpretation of the specifications.
Summary of change:⌘	The terms 2100, 1900, 1800 and 800 are replaced with Band I, Band II, Band III, and Band VI.

The IE names within the ASN.1 are not changed in order to maintain compatibility with release 99, but a comment is added to describe how the IE names map to the band numbering of 25.101.

Isolated Impact Analysis
Functionality corrected: FDD frequency band identification

Isolated impact statement: Correction to a function where specification not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. |
| **Consequences if not approved:** ⌘ | 25.331 will not be consistent with 25.101 with regard to the identification of FDD operating bands. |
| **Clauses affected:** ⌘ | 8.1.16.3, 8.6.3.12, 10.3.3.21a, 10.3.3.42a, 10.3.3.35b, 11.3 |

		Y	N		
Other specs	⌘			Other core specifications	⌘

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.

8.1.16.3 INTER RAT HANDOVER INFO message contents to set

The UE shall:

1> include the IE "UE security information"; and

1> not include the IE "UE Specific Behaviour Information 1 interRAT".

1> in case support for the compressed version of the inter RAT handover info is indicated via the other radio access technology:

2> in case the other radio access technology indicates the number of pre-defined configurations mandatory to report:

3> omit reporting (some) of the pre-defined configurations beyond the number indicated by the other radio access technology if this makes the INTER RAT HANDOVER INFO message size optimised for the other radio access technology.

NOTE: In case of GSM, the omission of pre-defined configurations applies in case it makes the message fit within one LapDm segment on the radio interface.

2> include of the following IEs the IE that after encoding has the smallest size: IE "Predefined configuration status information compressed" or the IE "Predefined configuration status information";

2> include the IE "UE radio access capability compressed".

1> else:

2> include the IE "Predefined configuration status information";

2> 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:

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

3> if the UE supports a single UTRA FDD Frequency Band different from Band I [21]2100 MHz:

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

4> 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".

3> else:

4> include the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the Band I [21]2100 MHz UTRA FDD frequency band;

4> 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 following in the variable INTER_RAT_HANDOVER_INFO_TRANSFERRED if they were included in the INTER RAT HANDOVER INFO message:

2> the IE "Predefined configuration status information";

2> the IE "UE security information";

2> the IE "UE radio access capability";

2> the IE "UE radio access capability extension"; and

2> the IE "UE radio access capability compressed".

1> and the procedure ends.

2> the IE "UE radio access capability compressed".

1> and the procedure ends.

8.6.3.12 Capability Update Requirement

If the IE "Capability Update Requirement" is included the UE shall:

1> if the IE "UE radio access FDD capability update requirement" has the value TRUE:

2> if the UE supports FDD mode:

3> store its UTRA FDD capabilities and its UTRA capabilities common to FDD and TDD in the IE "UE radio access capability" and the IE "UE radio access capability extension" in variable UE_CAPABILITY_REQUESTED as specified below:

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

4> if the UE supports a single UTRA FDD Frequency Band different from ~~2100 MHz~~Band I [21]:

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

5> store 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".

4> else:

5> store the IE "UE radio access capability", including the IEs "RF capability FDD" and "Measurement capability" associated with the Band I [21]~~2100 MHz UTRA FDD frequency band~~.

1> if the IE "UE radio access 3.84 Mcps TDD capability update requirement" has the value TRUE:

2> if the UE supports 3.84 Mcps TDD mode:

3> store its UTRAN-specific 3.84 Mcps TDD capabilities and its UTRAN–specific capabilities common to FDD and TDD in the variable UE_CAPABILITY_REQUESTED.

1> if the IE "UE radio access 1.28 Mcps TDD capability update requirement" has the value TRUE:

2> if the UE supports 1.28 Mcps TDD mode:

3> store its UTRAN-specific 1.28 Mcps TDD capabilities and its UTRAN–specific capabilities common to FDD and TDD in the variable UE_CAPABILITY_REQUESTED.

1> if the IE "System specific capability update requirement list" is present:

2> for each of the RAT requested in the IE "UE system specific capability"

3> if the UE supports the listed RAT:

4> include its inter-RAT radio access capabilities for the listed RAT in the IE "UE system specific capability" from the variable UE_CAPABILITY_REQUESTED.

If the IE " Capability update requirement " is not present, the UE shall:

1> assume the default values as specified in subclause 10.3.3.2 and act in accordance with the above.

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~~Band I, ~~FDD1900~~Band II,	The default value is the same as indicated in the IE "Frequency band" included in the IE " UE radio access capability extension". <u>Band numbering is defined in [21].</u> Four spare values are needed	
			~~FDD1800~~Band III,		REL-5
			~~FDD800~~Band VI)		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~~Band I, ~~FDD1900~~Band II,	Band numbering is defined in [21] Four spare values are needed	
			~~FDD1800~~Band III,		REL-5
			~~FDD800~~Band VI)		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		

10.3.6.35b Frequency band indicator

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

11.3 Information element definitions

```
RadioFrequencyBandFDD ::=             ENUMERATED {
    -- fdd2100, fdd1900, fdd1800 correspond to Band I, Band II and Band III respectively
                              fdd2100,
                              fdd1900,
                              fdd1800,
                              fdd800bandVI, spare4, spare3, spare2, spare1 }

RF-CapabBandListFDDComp::=  SEQUENCE (SIZE (1..maxFreqBandsFDD)) OF
    -- the first entry corresponds with the first value of IE RadioFrequencyBandFDD,
    -- fdd2100, and so on
    RF-CapabBandFDDComp
```