## **RP-030211**

## TSG RAN Meeting #20 Hämeenlinna, Finland, 3 - 6 June, 2003

TitleCRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters<br/>specifications) on "Spurious emissions: co-existence with FDD in the same<br/>geographic area"SourceTSG RAN WG4Agenda Item7.4.4

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-020590	25.106	022	1	F	Rel-4	4.5.0	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	RInImp-REP
R4-020591	25.106	023	1	A	Rel-5	5.4.0	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	RInImp-REP
R4-020592	25.143	031	1	F	Rel-4	4.7.0	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	RInImp-REP
R4-020593	25.143	032	1	A	Rel-5	5.4.0	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	RInImp-REP

## R4-030590

## Paris, France 19 - 23 May, 2003

	CHANGE REQUEST												
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Other comments:	ж	Equiva	alent CR	s in other	Releases	: CR0	)23r1	cat. A	to 25.1	106 v	5.4.0		

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 9.2.2 Co-existence with UTRA-FDD BS

## 9.2.2.1 Operation in the same geographic area

This requirement shall be applied for the protection of UTRA-FDD BS receivers in geographic areas in which UTRA-FDD Repeater and UTRA-FDD BS are deployed. The requirement applies only to the down-link direction of the Repeater.

## 9.2.2.1.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.8a: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver

Band	<u>Maximum</u> <u>Level</u>	Measurement Bandwidth	Note
<u>1920 - 1980MHz</u> For operation in Frequency Bands defined in sub-clause 4.25.1(a)	<u>-96 dBm</u>	<u>100 kHz</u>	
<u>1850 - 1910 MHz</u> For operation in Frequency Bands defined in sub-clause 4.25.1 (b)	<u>-96 dBm</u>	<u>100kHz</u>	

## 9.2.2.2 Co-location with UTRA-FDD BS

This requirement may be applied for the protection of UTRA-FDD BS receivers when UTRA-FDD Repeater and UTRA-FDD BS are co-located. The requirement applies only to the down-link direction of the repeater.

#### 9.2.2.4<u>2.2</u> Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.8b: UTRA Repeater spurious emissions limits for protection of co-located UTRA FDD BS receiver

Band	Maximum	Measurement Bandwidth	Note
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause <del>5.2</del> 5.1 (a)	-96 dBm	100 kHz	
1850-1910 MHz For operation in Frequency Bands defined in sub-clause <u>5-25.1 (</u> b)	-96 dBm	100kHz	

# 11.3 Co-existence with GSM 900 and/or DCS 1800

====== next changed section =====

The following requirement may be applied when GSM 900 BTS and/or DCS 1800 BTS and UTRA-FDD Repeaters are co-exist. The requirement shall bet met with the repeater operating at maximum gain.

## R4-030591

## Paris, France 19 - 23 May, 2003

	CHANGE REQUEST												
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Consequences if not approved: * Requirements for co-existence with other FDD systems will be missing in a specification. Isolated Impact Analysis: UTRA FDD network performance could be affected by to high FDD Spuric Emission, if this CR is not approved. Approval of this CR would not affect FDD implementation behaving like in in the CR.													
Clauses affected:	<b>%</b> 9.2.2, 11.3												
Other specs affected:	Y     N       X     Other cor       X     Test spec       X     O&M Spec	e specifications sifications ecifications	ж ТS25.	143									
Other comments:	# Equivalent CRs	in other Releases:	CR022r1 ca	at. F to 25.106 v	4.5.0								

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Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 9.2.2 Co-existence with UTRA-FDD BS

## 9.2.2.1 Operation in the same geographic area

This requirement shall be applied for the protection of UTRA-FDD BS receivers in geographic areas in which UTRA-FDD Repeater and UTRA-FDD BS are deployed. The requirement applies only to the down-link direction of the Repeater.

## 9.2.2.1.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.8a: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver

Band	<u>Maximum</u> <u>Level</u>	Measurement Bandwidth	Note
<u>1920 - 1980MHz</u> For operation in Frequency Bands defined in sub-clause 4.25.1(a)	<u>-96 dBm</u>	<u>100 kHz</u>	
<u>1850 - 1910 MHz</u> For operation in Frequency Bands defined in sub-clause 4.25.1(b)	<u>-96 dBm</u>	<u>100kHz</u>	

## 9.2.2.2 Co-location with UTRA-FDD BS

This requirement may be applied for the protection of UTRA-FDD BS receivers when UTRA-FDD Repeater and UTRA-FDD BS are co-located. The requirement applies only to the down-link direction of the repeater.

#### 9.2.2.4<u>2.2</u> Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.8b: UTRA Repeater spurious emissions limits for protection of co-located UTRA FDD BS receiver

Band	Maximum Level	Measurement Bandwidth	Note
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause <u>5-25.1(a)</u>	-96 dBm	100 kHz	
1850-1910 MHz For operation in Frequency Bands defined in sub-clause <u>5.25.1(b)</u>	-96 dBm	100kHz	

# 11.3 Co-existence with GSM 900 and/or DCS 1800

====== next changed section =====

The following requirement may be applied when GSM 900 BTS and/or DCS 1800 BTS and UTRA-FDD Repeaters are co-exist. The requirement shall bet met with the repeater operating at maximum gain.

## R4-030592

## Paris, France 19 - 23 May, 2003

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#### How to create CRs using this form:

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Other comments:

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

Equivalent CRs in other Releases: CR032r1 cat. A to 25.143 v5.4.0

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 9.2.2.3 Co-existence with UTRA-FDD BS

### 9.2.2.3.1 Operation in the same geographic area

This requirement shall be applied for the protection of UTRA-FDD BS receivers in geographic areas in which UTRA-FDD Repeater and UTRA-FDD BS are deployed. The requirement applies only to the down-link direction of the Repeater.

9.2.2.3.1.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.12a: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver

Band	<u>Maximum</u> <u>Level</u>	Measurement Bandwidth	<u>Note</u>
<u>1920 - 1980MHz</u> For operation in Frequency Bands defined in sub-clause <u>4.2</u> 4.1(a)	<u>-96 dBm</u>	<u>100 kHz</u>	
<u>1850 - 1910 MHz</u> For operation in Frequency Bands defined in sub-clause 4.24.1 (b)	<u>-96 dBm</u>	<u>100kHz</u>	

## 9.2.2.3.2 Co-location with UTRA-FDD BS

This requirement may be applied for the protection of UTRA-FDD BS receivers when UTRA-FDD Repeater and UTRA-FDD BS are co-located. The requirement applies only to the down-link direction of the Repeater.

#### 9.2.2.3.2.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.12<u>b</u>: UTRA Repeater Spurious emissions limits for protection of co-located UTRA FDD BS receiver

Band	Maximum Level	Measurement Bandwidth	Note
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause <u>4.24.1 (</u> a)	-96 dBm	100 kHz	
1850-1910 MHz For operation in Frequency Bands defined in sub-clause <u>4.24.1 (</u> b)	-96 dBm	100kHz	

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## Paris, France 19 - 23 May, 2003

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## How to create CRs using this form:

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Other comments:

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

Equivalent CRs in other Releases: CR031r1 cat. F to 25.143 v4.7.0

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 9.2.2.3 Co-existence with UTRA-FDD BS

### 9.2.2.3.1 Operation in the same geographic area

This requirement shall be applied for the protection of UTRA-FDD BS receivers in geographic areas in which UTRA-FDD Repeater and UTRA-FDD BS are deployed. The requirement applies only to the down-link direction of the Repeater.

9.2.2.3.1.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.12: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver

Band	<u>Maximum</u> <u>Level</u>	Measurement Bandwidth	Note
<u>1920 - 1980MHz</u> For operation in Frequency Bands defined in sub-clause <u>4.2</u> 4.1 (a)	<u>-96 dBm</u>	<u>100 kHz</u>	
<u>1850 - 1910 MHz</u> For operation in Frequency Bands defined in sub-clause 4.24.1 (b)	<u>-96 dBm</u>	<u>100kHz</u>	

## 9.2.2.3.2 Co-location with UTRA-FDD BS

This requirement may be applied for the protection of UTRA-FDD BS receivers when UTRA-FDD Repeater and UTRA-FDD BS are co-located. The requirement applies only to the down-link direction of the Repeater.

#### 9.2.2.3.2.1 Minimum Requirement

The power of any spurious emission shall not exceed:

# Table 9.12: UTRA Repeater Spurious emissions limits for protection of co-located UTRA FDD BS receiver

Band	Maximum Level	Measurement Bandwidth	Note
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause <u>4.1_4<del>.2</del>(</u> a)	-96 dBm	100 kHz	
1850-1910 MHz For operation in Frequency Bands defined in sub-clause <u>4.1 <mark>4.2</mark>(b)</u>	-96 dBm	100kHz	

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