RP-030593

Title CRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters

specifications), "Spurious emissions: Co-existence with UTRA-FDD BS new

UL requirement"

Source TSG RAN WG4

Agenda Item 7.5.4

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-031097	25.106	028	1	F	Rel-4	4.6.0	Spurious emissions: Co-existence with UTRA-FDD BS new UL requirement	RInImp-REP
R4-031098	25.106	029	1	Α	Rel-5	5.6.0	Spurious emissions: Co-existence with UTRA-FDD BS new UL requirement	RInImp-REP
R4-031099	25.143	039	1	F	Rel-4	4.8.0	Spurious emissions: Co-existence with UTRA-FDD BS new UL requirement	RInImp-REP
R4-031100	25.143	040	1	Α	Rel-5	5.6.0	Spurious emissions: Co-existence with UTRA-FDD BS new UL requirement	RInImp-REP

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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.

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

In the down link direction of the Repeater the power of any spurious emission shall not exceed:

Table 9.7A: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver for the down link direction of the Repeater

Band	Maximum Level	Measurement Bandwidth	Note
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause 5.1(a)	-96 dBm	100 kHz	
1850 - 1910 MHz For operation in Frequency Bands defined in sub-clause 5.1 (b)	-96 dBm	100_kHz	

In the up link direction of the Repeater the power of any spurious emission shall not exceed:

<u>Table 9.7B: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS</u>
receiver for the up link direction of the Repeater

Band	Maximum Level	Measurement Bandwidth	<u>Note</u>
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause 5.1(a)	<u>-53 dBm</u>	<u>100 kHz</u>	
1850 - 1910 MHz For operation in Frequency Bands defined in sub-clause 5.1 (b)	<u>-53 dBm</u>	<u>100 kHz</u>	

NOTE 1: These requirements in Table 9.7B for the up link direction of the Repeater reflect what can be achieved with present state of the art technology and are based on a coupling loss of 73 dB between a Repeater and a UTRA FDD BS receiver.

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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.

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

In the down link direction of the Repeater the power of any spurious emission shall not exceed:

Table 9.7A: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver for the down link direction of the Repeater

Operating Band	Band	Maximum Level	Measurement Bandwidth	Note
I	1920 - 1980_MHz	-96 dBm	100 kHz	
II	1850 <u>-</u> - 1910 MHz	-96 dBm	100_kHz	

In the up link direction of the Repeater the power of any spurious emission shall not exceed:

<u>Table 9.7B: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS</u>
receiver for the up link direction of the Repeater

Operating Band	<u>Band</u>	Maximum Level	Measurement Bandwidth	<u>Note</u>
<u> </u>	<u>1920 – 1980 MHz</u>	<u>-53 dBm</u>	<u>100 kHz</u>	
<u>II</u>	<u> 1850 - 1910 MHz</u>	<u>-53 dBm</u>	<u>100 kHz</u>	

NOTE 1: These requirements in Table 9.7B for the up link direction of the Repeater reflect what can be achieved with present state of the art technology and are based on a coupling loss of 73 dB between a Repeater and a UTRA FDD BS receiver.

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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

In the down link direction of the Repeater the power of any spurious emission shall not exceed:

Table 9.11A: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver for the down link direction of the Repeater

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

In the up link direction of the Repeater the power of any spurious emission shall not exceed:

<u>Table 9.11B: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD</u>

<u>BS receiver for the up link direction of the Repeater</u>

<u>Band</u>	Maximum Level	Measurement Bandwidth	<u>Note</u>
1920 - 1980MHz For operation in Frequency Bands defined in sub-clause 4.1(a)	<u>-53 dBm</u>	<u>100 kHz</u>	
1850 - 1910 MHz For operation in Frequency Bands defined in sub-clause 4.1 (b)	<u>-53 dBm</u>	<u>100 kHz</u>	

NOTE 1: These requirements in Table 9.11B for the up link direction of the Repeater reflect what can be achieved with present state of the art technology and are based on a coupling loss of 73 dB between a Repeater and a UTRA FDD BS receiver.

3GPP TSG RAN WG4 (Radio) Meeting #29

R4-031100

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How to create CRs using this form:

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

In the down link direction of the Repeater the power of any spurious emission shall not exceed:

Table 9.11A: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD BS receiver for the down link direction of the Repeater

Operating Band	Band	Maximum Level	Measurement Bandwidth	Note
	1920 - 1980_MHz	-96 dBm	100 kHz	
II	1850 1910 MHz	-96 dBm	100 kHz	

<u>In the up link direction of the Repeater the power of any spurious emission shall not exceed:</u>

Table 9.11B: UTRA Repeater Spurious emissions limits in geographic coverage area of UTRA FDD

BS receiver for the up link direction of the Repeater

Operating Band	<u>Band</u>	Maximum Level	Measurement Bandwidth	<u>Note</u>
<u>I</u>	<u> 1920 – 1980 MHz</u>	<u>-53 dBm</u>	<u>100 kHz</u>	
<u>II</u>	1850 - 1910 MHz	<u>-53 dBm</u>	100 kHz	

NOTE 1: These requirements in Table 9.11B for the up link direction of the Repeater reflect what can be achieved with present state of the art technology and are based on a coupling loss of 73 dB between a Repeater and a UTRA FDD BS receiver.