

TSG RAN Meeting #19
Birmingham, UK, 11 - 14 March 2003

RP-030144

Title CRs (R'99 and Rel4/Rel5 category A) to TS 34.124 on "Correction to radiated spurious emission measurement bandwidth"
Source Ericsson
Agenda Item 8.4.3

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
-	34.124	013		F	R99	3.3.0	Correction to radiated spurious emission measurement bandwidth	TEI
-	34.124	014		A	Rel-4	4.1.0	Correction to radiated spurious emission measurement bandwidth	TEI
-	34.124	012	1	A	Rel-5	5.2.0	Correction to radiated spurious emission measurement bandwidth	TEI

CR-Form v7

CHANGE REQUEST

~~34.124 CR 013~~ ~~rev -~~ Current version: ~~3.3.0~~

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Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	Correction to radiated spurious emission measurement bandwidth		
Source:	Ericsson		
Work item code:	TEI	Date:	06/03/2003
Category:	F	Release:	R99
	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 TR 21.900 .		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 measurement bandwidth for radiated spurious emissions above 1GHz is not in line with ITU-R SM 329. In 34.124 v3.3.0, it is incorrect for both Idle and Traffic mode. If the correction is not made from R99 but only for future releases, there will be different and conflicting requirements in each release.
Summary of change:	The measurement bandwidth is corrected.
Consequences if not approved:	The specification will be in conflict to international regulatory requirements in ITU-R SM.329-9, CISPR 22, CISPR 16-1 and harmonised standards.
	Isolated impact analysis: Approval of this CR would not affect UE implementation behaving like indicated in the CR, which is already required by e.g. harmonised standards.

Clauses affected:	8.2.3										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
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Other comments:											

8.2.3 Limits

The references for these requirements are ITU-R SM 329-8 [11] and TS 25.101 subclauses 6.6.3.1. and 7.9.1. [12]

The frequency boundary and reference bandwidths for the detailed transitions of the limits between the requirements for out of band emissions and spurious emissions are based on ITU-R SM 329-8 [11].

These requirements are only applicable for frequencies, which are greater than 12.5 MHz away from the UE centre carrier frequency

Table 3: Radiated Spurious emissions requirements

Frequency	Minimum requirement (e.r.p.)/ Reference Bandwidth Idle mode	Minimum requirement (e.r.p.) / Reference Bandwidth Traffic mode
30 MHz $\leq f < 1000$ MHz	-57dBm / 100 kHz	-36 dBm / 100 kHz
1 GHz $\leq f < 12.75$ GHz $f_c - 12.5$ MHz $< f < f_c + 12.5$ MHz	-47dBm / 100 kHz 1 MHz Not defined	-30 dBm / 100 kHz 1 MHz Not defined

NOTE: f_c is the centre frequency of the TCH. The frequency range $f_c \pm 12.5$ MHz are covered by the "Out of Band" emission requirements of TS 34.121[2] and TS 34.122 [3].

CR-Formv7

CHANGE REQUEST

~~34.124~~ **34.124 CR 014** ~~rev~~ - ~~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 Radio Access Network Core Network

Title:	Correction to radiated spurious emission measurement bandwidth		
Source:	Ericsson		
Work item code:	TEI	Date:	06/03/2003
Category:	A	Release:	Rel-4
	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 TR 21.900 .		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 measurement bandwidth for radiated spurious emissions above 1GHz is not in line with ITU-R SM 329. In 34.124 v3.3.0, it is incorrect for both Idle and Traffic mode. If the correction is not made from R99 but only for future releases, there will be different and conflicting requirements in each release.
Summary of change:	The measurement bandwidth is corrected. Reference to the core specification is also corrected.
Consequences if not approved:	The specification will be in conflict to international regulatory requirements in ITU-R SM.329-9, CISPR 22, CISPR 16-1 and harmonised standards. Isolated impact analysis: Approval of this CR would not affect UE implementation behaving like indicated in the CR, which is already required by e.g. harmonised standards.

Clauses affected:	8.2.3								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<input type="checkbox"/>	<input checked="" type="checkbox"/>								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								
Other comments:									

8.2.3 Limits

The references for these requirements are ITU-R SM 329-9 [11], SM.1539 [28] and TS 25.101 subclauses 6.6.3.1. and 7.9.1. [12] and TS 25.102 subclauses 6.6.3 and 7.9 [13] respectively.

8.2.3.1 FDD and 3,84 Mcps TDD option

The frequency boundary and reference bandwidths for the detailed transitions of the limits between the requirements for out of band emissions and spurious emissions are based on ITU-R SM 329-9 [11].

These requirements are only applicable for frequencies in the spurious domain.

Table 3: Radiated Spurious emissions requirements

Frequency	Minimum requirement (e.r.p.)/ Reference Bandwidth Idle mode	Minimum requirement (e.r.p.)/ Reference Bandwidth Traffic mode
30 MHz ? $f < 1000$ MHz	-57dBm / 100 kHz	-36 dBm / 100 kHz
1 GHz ? $f < 12.75$ GHz	-47dBm / 1MHz	-30 dBm / 100 kHz 1 MHz
$f_c - 12.5$ MHz $< f < f_c + 12.5$ MHz	Not defined	Not defined

NOTE: f_c is the centre frequency of the TCH. The frequency range $f_c ? 12.5$ MHz are covered by the "Out of Band" emission requirements of TS 34.121[2] and TS 34.122 [3].

8.2.3.2 1,28 Mcps TDD option

The frequency boundary and reference bandwidths for the detailed transitions of the limits between the requirements for out of band emissions and spurious emissions are based on ITU-R SM 329-9 [11].

These requirements are only applicable for frequencies, which are greater than 4 MHz away from the UE centre carrier frequency

Table 3.1: Radiated Spurious emissions requirements

Frequency	Minimum requirement (e.r.p.)/ Reference Bandwidth Idle mode	Minimum requirement (e.r.p.)/ Reference Bandwidth Traffic mode
30 MHz ? $f < 1000$ MHz	-57dBm / 100 kHz	-36 dBm / 100 kHz
1 GHz ? $f < 12.75$ GHz	-47dBm / 1MHz	-30 dBm / 1 MHz
$f_c - 4$ MHz $< f < f_c + 4$ MHz	Not defined	Not defined

NOTE: f_c is the centre frequency of the TCH. The frequency range $f_c ? 4$ MHz are covered by the "Out of Band" emission requirements of ~~TS 34.121[2]~~ and TS 34.122 [3].

CHANGE REQUEST

~~34.124~~ **CR 012** ~~rev~~ **1** ~~Current version:~~ **5.2.0**

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 Radio Access Network Core Network

Title:	Correction to radiated spurious emission measurement bandwidth		
Source:	Ericsson		
Work item code:	TEI	Date:	06/03/2003
Category:	A	Release:	Rel-5
	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 TR 21.900 .		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)

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Y	N										
X	X										
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X	X										
Other comments:											

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The references for these requirements are ITU-R SM 329-9 [11], SM.1539 [28] and TS 25.101 subclauses 6.6.3.1. and 7.9.1. [12] and TS 25.102 subclauses 6.6.3 and 7.9 [13] respectively.

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$f_c - 4$ MHz $< f < f_c + 4$ MHz	Not defined	Not defined

NOTE: f_c is the centre frequency of the TCH. The frequency range $f_c \pm 4$ MHz are covered by the "Out of Band" emission requirements of ~~TS 34.121[2]~~ and TS 34.122 [3].