Title: Agreed CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331

Source: TSG-RAN WG2

Agenda item: 7.2.3

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Versio	Versio
R2-022105	tech.end.	25.331	1517	1	R99	Unit at L3 filtering (proposal 2)	F	3.11.0	
R2-022106	tech.end.	25.331	1518	1	Rel-4	Unit at L3 filtering (proposal 2)	Α	4.5.0	
R2-022107	tech.end.	25.331	1519	1	Rel-5	Unit at L3 filtering (proposal 2)	Α	5.1.0	

# 3GPP TSG-RAN WG2 Meeting #31 Stockholm, Sweden, 19th - 23rd August 2002

### Tdoc #R2-022105

			СН	ANG	ERE	EQI	UES	T				CR-Form-v5
*	25	.331	CR 15	17	# r€	eν	<b>1</b> <sup>H</sup>	ß Cı	urrent vers	ion:	3.11.0	<b>#</b>
For <u>HELP</u> on t	ısing	this forr	n, see bo	ttom of t	this page	e or l	ook at	the p	op-up text	over	the # sy	mbols.
Proposed change	affec	ts: #	(U)SIM	N	ME/UE	X	Radio	Acces	ss Network	κ <mark>Χ</mark>	Core No	etwork
Title:	Un	it at L3	filtering (p	roposal	2)							
Source: #	Mo	torola (	TSG-RAN	I WG2 t	echnical	lly en	dorse	d)				
Work item code: ₩	TE	l							Date: ₩	12 /	August 20	002
Category: अ	Deta	F (corre A (corre B (addi C (func D (edite	he following ection) esponds to ition of feat tional modifi lanations o GGPP TR 2	a correcture), ification (cation) f the abo	ction in ar	e)			elease:	(GSM (Relea (Relea (Relea (Relea (Relea		
Reason for change	e: #	For CP event e	all be used ICH RSCP valuation e ICH E <sub>c</sub> /N <sub>0</sub> , valuation e er Measure	in the La , "dBm" i equations , "dB" is equations ement qu	ayer 3 filtons s. used in the s. uantities,	ering.  the Mehe ME	MEASU EASUR ct to La	IREME EMEN	ENT REPORT  IT REPORT  filtering, the equations.	RT, while	nile "mW" e "ratio" is	is used in used in
Summary of chang	ge: #	In sect formula Impact not imp	ion 8.6.7.a) is the s	ame uni s: This ( nis CR, i	it as the CR is co	unit nside	used in ered to	n the o	used for <b>M</b> event eval isolated ir tering usin	uation npact	n. If the U	E does
Consequences if not approved:	*	A UE ii	mplement	ation m	ay use v	wrong	g unit ii	n Laye	er 3 filterin	g.		
Clauses affected:	ж	8.6.7.2	2									
Other specs affected:	*	Te:	her core s st specific kM Specifi	ations	tions	Ж						
Other comments:	$_{\aleph}$											

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

Comprehensive information and tips about how to create CRs can be found at: <a href="http://www.3gpp.org/3G">http://www.3gpp.org/3G</a> <a href="http://www.3gpp.org/3G">Specs/CRs.htm</a>. 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.
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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

### 8.6.7.2 Filter coefficient

If the IE "Filter coefficient" is received the UE shall apply filtering of the measurements for that measurement quantity according to the formula below. This filtering shall be performed by the UE before UE event evaluation. The UE shall also filter the measurements reported in the IE "Measured results". The filtering shall not be performed for the measurements reported in the IE "Measured results on RACH" and for cell-reselection in connected or idle mode.

The filtering shall be performed according to the following formula.

$$F_n = (1-a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the MEASUREMENT REPORT message or the unit used in the event evaluation.

 $a = 1/2^{(k/2)}$ , where k is the parameter received in the IE "Filter coefficient".

NOTE: if k is set to 0 that will mean no layer 3 filtering.

In order to initialise the averaging filter,  $F_{\theta}$  is set to  $M_I$  when the first measurement result from the physical layer measurement is received.

The physical layer measurement results are sampled once every measurement period. The measurement period and the accuracy for a certain measurement is defined in [19] and [20].

The UE shall support 2 different layer 3 filters per measurement type defined in section 8.4.0 (i.e. the UE shall be capable to apply at least 2 different L3 filters to intra-frequency measurement results, at least 2 different L3 filters to inter-frequency measurement results etc). If a MEASUREMENT CONTROL message is received that would require the UE to configure more than 2 different layer 3 filters, the UE may:

1> set the variable CONFIGURATION\_INCOMPLETE to TRUE.

## 3GPP TSG-RAN WG2 Meeting #31 Stockholm, Sweden, 19th - 23rd August 2002

### Tdoc #R2-022106

	OHANO	E REQU	JEST		
ж <mark>25.</mark>	.331 CR 1518	жrev	<b>1</b> #	Current version	4.5.0 **
For <u>HELP</u> on using t	this form, see bottom of t	his page or lo	ook at the	pop-up text ove	er the ¥ symbols.
Proposed change affect	ts:	ME/UE <mark>X</mark> F	Radio Ac	cess Network X	Core Network
Title:	t at L3 filtering (proposal	2)			
Source: # Mot	torola (TSG-RAN WG2 te	echnically end	dorsed)		
Work item code:				Date: 第 1	2 August 2002
Detai be fo	one of the following categor F (correction) A (corresponds to a correct B (addition of feature), C (functional modification of the decided of the control of the decided of	etion in an earlie of feature) ove categories o	can	2 (GS ) R96 (Re R97 (Re R98 (Re R99 (Re REL-4 (Re REL-5 (Re	following releases: SM Phase 2) elease 1996) elease 1997) elease 1998) elease 1999) elease 4)
	For CPICH RSCP, "dBm" is event evaluation equations  For CPICH E <sub>d</sub> /N <sub>0</sub> , "dB" is the event evaluation equations  For other Measurement quanties  MEASUREMENT REPORT	s used in the M used in the ME antities, subjec	ASUREM	ENT REPORT, w	hile "ratio" is used in
	Revision 1:  In section 8.6.7.2, it is conformula) is the same unit  Impact analysis: This Conot implement this CR, it  Measurement quantity.	t as the unit u CR is conside	used in th red to ha	e event evaluative isolated impa	ion. act. If the UE does
Consequences if # not approved:	A UE implementation ma	ay use wrong	unit in L	ayer 3 filtering.	
Clauses affected:	8.6.7.2				
Other specs # affected:	Other core specificat Test specifications O&M Specifications	tions			

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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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 $a = 1/2^{(k/2)}$ , where k is the parameter received in the IE "Filter coefficient".

NOTE: if k is set to 0 that will mean no layer 3 filtering.

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1> set the variable CONFIGURATION\_INCOMPLETE to TRUE.

## 3GPP TSG-RAN WG2 Meeting #31 Stockholm, Sweden, 19th - 23rd August 2002

### Tdoc #R2-022107

	CHANGE REQUEST
* <b>25</b>	.331 CR 1519 # rev 1 # Current version: 5.1.0 #
For <u>HELP</u> on using	this form, see bottom of this page or look at the pop-up text over the # symbols.
Proposed change affec	ets: 第 (U)SIM ME/UE X Radio Access Network X Core Network
Title:	it at L3 filtering (proposal 2)
Source:	otorola (TSG-RAN WG2 technically endorsed)
Work item code: 第 TE	<b>Date:</b> # 12 August 2002
Deta	Release:   Release:  Rel-5  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)  Release:  Rel-5  R96 (Release 1996)  R97 (Release 1997)  R98 (Release 1998)  R99 (Release 1998)  R99 (Release 1999)  Release 5)
	that shall be used in the Layer 3 filtering.  For CPICH RSCP, "dBm" is used in the MEASUREMENT REPORT, while "mW" is used in event evaluation equations.  For CPICH E <sub>c</sub> /N <sub>0</sub> , "dB" is used in the MEASUREMENT REPORT, while "ratio" is used in event evaluation equations.  For other Measurement quantities, subject to Layer 3 filtering, the same unit is used in the MEASUREMENT REPORT as in the event evaluation equations.
Summary of change: ₩	Revision 1: In section 8.6.7.2, it is corrected so that the unit used for $\mathbf{\textit{M}}_n$ (input in the filter formula) is the same unit as the unit used in the event evaluation. Impact analysis: This CR is considered to have isolated impact. If the UE does not implement this CR, it may perform Layer 3 filtering using wrong unit for the Measurement quantity.
Consequences if # not approved:	A UE implementation may use wrong unit in Layer 3 filtering.
Clauses affected: 第	8.6.7.2
Other specs # affected:	Test specifications O&M Specifications

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