#### Technical Specification Group Services and System Aspects Meeting #25, Palm Springs, CA, USA, 13 - 16 September 2004

**SA5 (Telecom Management)** Source:

3 Rel-4/5/6 CR 32.403 Correction of i Mobility Managementî GPRS attach measurement definitions Title:

**Document for: Approval** 

Agenda Item: 7.5.3

Doc-1 <sup>st</sup> - Level	Doc-2 <sup>nd</sup> - Level	Spec	CR	Rev	Phase	Subject	Cat	Ver- Cur	Wi
SP-040575	S5-048563	32.403	046		IRPI-4	Correction of iMobility Managementi GPRS attach measurement definitions	F	4.7.0	OAM- PM
SP-040575	S5-048565	32.403	047			Correction of iMobility Managementi GPRS attach measurement definitions	А	5.7.0	OAM- PM
SP-040575	S5-048568	32.403	048		IRAI-N	Correction of iMobility Managementi GPRS attach measurement definitions	А	6.4.0	OAM- PM

Other comments:

Meeting #38bis, Sor	phia Antipolis, FRANCE	, 28 Jun - 2 Jul 200	
	CHANGE F	REQUEST	CR-Form-v7
<mark>網</mark> 32	<mark>2.403</mark> CR <mark>046 </mark> ⊭	rev - E Curren	t version: <b>4.7.0</b>
For <u><b>HELP</b></u> on using	this form, see bottom of this pa	age or look at the pop-up	o text over the 🕱 symbols.
Proposed change affec	ets: │ UICC apps 網 <mark> </mark>	ME Radio Access N	etwork Core Network X
Title: 第 Co	prrection of iMobility Manageme	entî GPRS attach meas	urement definitions
Source:  # SA	<b>\5</b> ( <u>Ilrui@bupt.edu.cn, liyewen</u> @	②chinamobile.com)	
Work item code: ₩ OA	\M-PM	Da	te:   器
Deta	one of the following categories:  F (correction)  A (corresponds to a correction in B (addition of feature),  C (functional modification of feat D (editorial modification)  ailed explanations of the above capund in 3GPP TR 21.900.	an earlier release) 2 R9 R9 ure) R9 R9 tegories can R6 R6	one of the following releases:  (GSM Phase 2) (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)
		Re	el-6 (Release 6)
Reason for change:  #	procedures, i.e. iGPRS attacked already attached and icombe types of attach procedures, send iATTACH ACCEPT mesthe iATTACH COMPLETE accept messages to AN. procedures, the retransmitted the timer should be eliminated ACCEPT messages are not accept messages accept messages are not accept messages accept	ch proceduresî, ìGPRS pined GPRS/IMSI attach f the attach procedure we essage to AN, start the sage from AN. If the tin message, the PS CN we For the measurements of "ATTACH ACCEPT" red. But currently, these red eliminated.	attach procedures with IMSI proceduresî. For this three was accepted, the PS CN will timer and wait for the ner expired before receiving ould retransmit "ATTACH about the successful attach nessages due to expiry of retransmitted "ATTACH
Summary of change: ₩	procedures with IMSI alread	y attachedî and ìSucces	
Consequences if # not approved:	The measurements about su	iccessful attach procedu	ires are not accurate.
Clauses affected: #	5.1.2, 5.1.10, 5.1.13		
Other specs # # affected:	Y N X Other core specification Test specifications O&M Specifications	ns ﷺ Rel-5/6 32.4	103

**Rel-5/6 Mirror CRs in S5-048565/568. Rel-5/6 Mirror CRs in S5-048565/568. Rel-5/6 Mirror CRs in S5-048565/568. Rel-5/6 Mirror CRs in S5-048565/568.** 

#### Change in Clause 5.1.2

#### 5.1.2 Successful GPRS attach procedures

- a) This measurement provides the number of successfully performed GPRS attach procedures within this SGSN
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach". If the i ATTACH ACCEPTi message is caused by a retransmission, this will not cause the counter to be increased. indicating a GPRS only attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccGprsAttach:

MM.SuccGprsAttach Combined (don't care);

MM.SuccGprsAttach.G GSM; UMTS. MM.SuccGprsAttach.U

- RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- Valid for packet switching.
- h) GSM/UMTS.

#### **End of Change in Clause 5.1.2**

#### Change in Clause 5.1.10

#### 5.1.10 Successful GPRS attach procedures with IMSI already attached

- a) This measurement provides the number of successfully performed GPRS attach procedures, while with IMSI is already attached. We count the attempts initiated within this SGSN area. The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach while IMSI attached". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased. indicating a GPRS attach while IMSI attached, in response to a previously transmitted "ATTACH REQUEST" indicating a GPRS attach while IMSI attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccImsiAttach:

MM.SuccImsiAttach Combined (don't care);

MM.SuccImsiAttach.G GSM: MM.SuccImsiAttach.U

- RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- Valid for packet switching.

UMTS.

#### **End of Change in Clause 5.1.10**

#### Change in Clause 5.1.13

#### 5.1.13 Successful combined GPRS/IMSI attach procedures

- a) This measurement provides the number of successfully <u>performed completed</u> combined GPRS/IMSI attach procedures <u>initiated</u> within this SGSN area.
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "Combined GPRS/IMSI attach". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased.indicating combined GPRS/IMSI attach, in response to a "ATTACH REQUEST" indicating combined GPRS/IMSI attach (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccCombiAttach:

- MM.SuccCombiAttach Combined (don't care);

MM.SuccCombiAttach.G GSM;MM.SuccCombiAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.
- h) GSM/UMTS.

## End of Change in Clause 5.1.13 End of Document

## Annex B (informative): Change history

Change history								
Date	TSG#	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2004	S_23	SP-040134	026		Correction of "Radio link addition" measurements	4.5.0	4.6.0	
Jun 2004	S_24	SP-040266	030		Correction of iInter-RAT handoverî measurements	4.6.0	4.7.0	
Jun 2004	S_24	SP-040267	033		Correction of iRAB assignment measurements	4.6.0	4.7.0	
Jun 2004	S_24	SP-040269	036		Correction of ihard handoveri measurement definitions	4.6.0	4.7.0	

Meeting #38bis, Sol	phia Antipolis, FRANCE,	28 Jun - 2 Jul 2004	00.5
	CHANGE R	EQUEST	CR-Form-v7
¥  <mark>32</mark>	<mark>2.403</mark> CR <mark>047</mark> ж।	rev B Current version	on: <b>5.7.0</b>
For <u><b>HELP</b></u> on using	this form, see bottom of this pa	ge or look at the pop-up text o	over the 🕱 symbols.
Proposed change affec	cts: UICC apps <mark>#</mark>	ME Radio Access Network	Core Network X
Title: # Co	orrection of iMobility Manageme	entî GPRS attach measuremer	nt definitions
Source: # SA	<mark>\5 (   rui@bupt.edu.cn,   iyewen@</mark>	chinamobile.com )	
Work item code: 器 ○A	AM-PM	Date: ₩	02/07/2004
Category: # A	one of the following categories:  • (correction)	Use <u>one</u> of th	Rel-5 ne following releases: GSM Phase 2)
	<ul> <li>A (corresponds to a correction in</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>ailed explanations of the above categorical in 3GPP TR 21.900</li> </ul>	an earlier release) R96 (I R97 (I Ire) R98 (I R99 (I egories can Rel-4 (I Rel-5 (I	Release 1996) Release 1997) Release 1998) Release 1999) Release 4) Release 5)
		Kei-o (i	Release 6)
Reason for change:  #	procedures, i.e. iGPRS attaction already attachedî and icombitypes of attach procedures, if send iATTACH ACCEPTî me iATTACH COMPLETEî mest the iATTACH COMPLETEî ne ACCEPT" messages to AN. I procedures, the retransmitted	GPRS services, there are three the procedures in inched GPRS/IMSI attach proced if the attach procedure was accessage to AN, start the timer assage from AN. If the timer expressage, the PS CN would reter the measurements about the inchessage in its acceptance of the inchessage in i	procedures with IMSI duresî. For this three cepted, the PS CN will and wait for the bired before receiving transmit "ATTACH the successful attach ges due to expiry of
Summary of change: #	procedures with IMSI already	S attach proceduresî, iSucces attachedî and iSuccessful co ate the retransmitted "ATTACH	ombined GPRS/IMSI
Consequences if # not approved:	The measurements about su	ccessful attach procedures are	e not accurate.
ποι αρρισνεα.			
Clauses affected: 第	5.1.2, 5.1.10, 5.1.13		
Other specs # affected:	Y N X Other core specification X Test specifications X O&M Specifications	ns ⊯ Rel-6 32.403	

Rel-5 Mirror CR to S5-048563.

 Rel-5 Mirr

Other comments:

#### Change in Clause 5.1.2

#### 5.1.2 Successful GPRS attach procedures

- a) This measurement provides the number of successfully performed GPRS attach procedures within this SGSN area.
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach". If the i ATTACH ACCEPTi message is caused by a retransmission, this will not cause the counter to be increased.indicating a GPRS only attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccGprsAttach:

- MM.SuccGprsAttach Combined (don't care);

MM.SuccGprsAttach.G GSM;MM.SuccGprsAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.
- h) GSM/UMTS.

#### **End of Change in Clause 5.1.2**

#### Change in Clause 5.1.10

### 5.1.10 Successful GPRS attach procedures with IMSI already attached

- a) This measurement provides the number of successfully performed GPRS attach procedures, while with IMSI is already attached. We count the attempts initiated within this SGSN area.

  The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach while IMSI attached". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased. indicating a GPRS attach while IMSI attached, in response to a previously transmitted "ATTACH REQUEST" indicating a GPRS attach while IMSI attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccImsiAttach:

- MM.SuccImsiAttach Combined (don't care);

- MM.SuccImsiAttach.G GSM;

- MM.SuccImsiAttach.U UMTS.
- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.

#### **End of Change in Clause 5.1.10**

#### Change in Clause 5.1.13

#### 5.1.13 Successful combined GPRS/IMSI attach procedures

- a) This measurement provides the number of successfully <u>performed completed</u> combined GPRS/IMSI attach procedures <u>initiated</u> within this SGSN area.
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "Combined GPRS/IMSI attach". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased.indicating combined GPRS/IMSI attach, in response to a "ATTACH REQUEST" indicating combined GPRS/IMSI attach (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccCombiAttach:

- MM.SuccCombiAttach Combined (don't care);

MM.SuccCombiAttach.G GSM;MM.SuccCombiAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.
- h) GSM/UMTS.

## End of Change in Clause 5.1.13 End of Document

# Annex C (informative): Change history

Change history									
Date	TSG#	TSG Doc.	CR	Rev	Subject/Comment	Old	New		
Sep 2003	S_21	SP-030431	022		Correction of ioutgoing intra-cell hard handovers measurementsi	5.3.0	5.4.0		
Dec 2003	S_22	SP-030645	024		Correction of terms used for subcounter definitions	5.4.0	5.5.0		
Mar 2004	S_23	SP-040134	027		Correction of "Radio link addition" measurements	5.5.0	5.6.0		
Jun 2004	S_24	SP-040266	031		Correction of iInter-RAT handoverî measurements	5.6.0	5.7.0		
Jun 2004	S_24	SP-040267	034		Correction of iRAB assignmenti measurements	5.6.0	5.7.0		
Jun 2004	S_24	SP-040269	037		Correction of ihard handoverî measurement definitions	5.6.0	5.7.0		

Meeting #38bis, Sophia Antipolis, FRANCE, 28 Jun - 2 Jul 2004

CHANGE REQUEST										
[ <b>3£</b> ]	32.403 CR 048									
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the <b>x</b> symbols.										
Proposed change at	fects: UICC apps ME Radio Access Network Core Network									
Title:	Correction of iMobility Managementi GPRS attach measurement definitions									
Source: #	SA5 ( <u>Ilrui@bupt.edu.cn</u> , <u>liyewen@chinamobile.com</u> )									
Work item code:₩	OAM-PM Date: # 02/07/2004									
	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)  Release: Rel-6  Release 1996)  R97 (Release 1997)  R98 (Release 1998)  R99 (Release 1998)  R99 (Release 1999)  Retailed explanations of the above categories can Rel-4  Rel-5 (Release 5)  Rel-6 (Release 6)									
Reason for change:	procedures, i.e. iGPRS attach proceduresî, iGPRS attach procedures with IMSI already attachedî and icombined GPRS/IMSI attach proceduresî. For this three types of attach procedures, if the attach procedure was accepted, the PS CN will send iATTACH ACCEPTî message to AN, start the timer and wait for the iATTACH COMPLETEî message from AN. If the timer expired before receiving the iATTACH COMPLETEî message, the PS CN would retransmit "ATTACH ACCEPT" messages to AN. For the measurements about the successful attach procedures, the retransmitted "ATTACH ACCEPT" messages due to expiry of the timer should be eliminated. But currently, these retransmitted "ATTACH ACCEPT" messages are not eliminated.									
Summary of change	procedures with IMSI already attachedî and iSuccessful combined GPRS/IMSI attach proceduresî to eliminate the retransmitted "ATTACH ACCEPT" messages.									
Consequences if not approved:	The measurements about successful attach procedures are not accurate.									
Clauses affected:	第 5.1.2, 5.1.10, 5.1.13									
Other specs affected:	米   X   Other core specifications   米   Test specifications O&M Specifications									
Other comments:	₩ Rel-6 Mirror CR to S5-048563.									

#### Change in Clause 5.1.2

#### 5.1.2 Successful GPRS attach procedures

- a) This measurement provides the number of successfully performed GPRS attach procedures within this SGSN area.
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach". If the i ATTACH ACCEPTi message is caused by a retransmission, this will not cause the counter to be increased.indicating a GPRS only attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccGprsAttach:

- MM.SuccGprsAttach Combined (don't care);

MM.SuccGprsAttach.G GSM;MM.SuccGprsAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.
- h) GSM/UMTS.

#### **End of Change in Clause 5.1.2**

#### Change in Clause 5.1.10

### 5.1.10 Successful GPRS attach procedures with IMSI already attached

- a) This measurement provides the number of successfully performed GPRS attach procedures, while with IMSI is already attached. We count the attempts initiated within this SGSN area.

  The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "GPRS attach while IMSI attached". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased. indicating a GPRS attach while IMSI attached, in response to a previously transmitted "ATTACH REQUEST" indicating a GPRS attach while IMSI attached (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccImsiAttach:

- MM.SuccImsiAttach Combined (don't care);

MM.SuccImsiAttach.G GSM;MM.SuccImsiAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.

#### **End of Change in Clause 5.1.10**

#### Change in Clause 5.1.13

#### 5.1.13 Successful combined GPRS/IMSI attach procedures

- a) This measurement provides the number of successfully <u>performed completed</u> combined GPRS/IMSI attach procedures <u>initiated</u> within this SGSN area.
  - The three measurement types defined in e) are subject to the "2 out of 3 approach".
- b) CC.
- c) Transmission of a "ATTACH ACCEPT" message to the MS, in response to a "ATTACH REQUEST" message with the "Attach type" information element indicating "Combined GPRS/IMSI attach". If the i ATTACH ACCEPTî message is caused by a retransmission, this will not cause the counter to be increased.indicating combined GPRS/IMSI attach, in response to a "ATTACH REQUEST" indicating combined GPRS/IMSI attach (TS 24.008).
- d) A single integer value per measurement type defined in e).
- e) MM.SuccCombiAttach:

- MM.SuccCombiAttach Combined (don't care);

MM.SuccCombiAttach.G GSM;MM.SuccCombiAttach.U UMTS.

- f) RA, specified by a concatenation of the MCC, MNC, LAC and the RAC.
- g) Valid for packet switching.
- h) GSM/UMTS.

## End of Change in Clause 5.1.13 End of Document

# Annex C (informative): Change history

Change history									
Date	TSG#	TSG Doc.	CR	Rev	Subject/Comment	Old	New		
Sep 2003	S_21	SP-030431	023		Correction of ioutgoing intra-cell hard handovers measurementsi	6.0.0	6.1.0		
Dec 2003	S_22	SP-030645	025		Correction of terms used for subcounter definitions	6.1.0	6.2.0		
Mar 2004	S_23	SP-040134	028		Correction of "Radio link addition" measurements	6.2.0	6.3.0		
Mar 2004	S_23	SP-040135	029		Add the measurements about Iu connection release	6.2.0	6.3.0		
Jun 2004	S_24	SP-040266	032		Correction of iInter-RAT handoverî measurements	6.3.0	6.4.0		
Jun 2004	S_24	SP-040267	035		Correction of iRAB assignmenti measurements	6.3.0	6.4.0		
Jun 2004	S_24	SP-040269	038		Correction of ihard handoverî measurement definitions	6.3.0	6.4.0		
Jun 2004	S_24	SP-040270	039		Addition of the measurements about RAB modification and RAB release by CN	6.3.0	6.4.0		