Source: **SA5 (Telecom Management)**

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

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-1st-Level	Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Ver-Cur	Wi
SP-040575	S5-048563	32.403	046	--	Rel-4	Correction of ìMobility Managementî GPRS attach measurement definitions	F	4.7.0	OAM-PM
SP-040575	S5-048565	32.403	047	--	Rel-5	Correction of ìMobility Managementî GPRS attach measurement definitions	A	5.7.0	OAM-PM
SP-040575	S5-048568	32.403	048	--	Rel-6	Correction of ìMobility Managementî GPRS attach measurement definitions	A	6.4.0	OAM-PM

CR-Form-v7

CHANGE REQUEST

⌘	**32.403** CR **046**	⌘**rev**	**-**	⌘	Current version:	**4.7.0**	⌘

*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 **X**

Title:	⌘	Correction of "Mobility Management" GPRS attach measurement definitions
Source:	⌘	**SA5** (llrui@bupt.edu.cn, liyewen@chinamobile.com)

Work item code:⌘	OAM-PM		***Date:*** ⌘	02/07/2004

Category:	⌘	**F**		***Release:*** ⌘	Rel-4

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)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use *one* 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:	⌘	In "Mobility Management" for GPRS services, there are three types of attach procedures, i.e. "GPRS attach procedures", "GPRS attach procedures with IMSI already attached" and "combined GPRS/IMSI attach procedures". For this three types of attach procedures, if the attach procedure was accepted, the PS CN will send "ATTACH ACCEPT" message to AN, start the timer and wait for the "ATTACH COMPLETE" message from AN. If the timer expired before receiving the "ATTACH COMPLETE" 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:⌘		Correct the "Successful GPRS attach procedures", "Successful GPRS attach procedures with IMSI already attached" and "Successful combined GPRS/IMSI attach procedures" to eliminate the retransmitted "ATTACH ACCEPT" messages.
Consequences if not approved:	⌘	The measurements about successful attach procedures are not accurate.

Clauses affected:	⌘	5.1.2, 5.1.10, 5.1.13

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
		X		O&M Specifications	Rel-5/6 32.403

Other comments:	⌘	Rel-5/6 Mirror CRs in S5-048565/568.

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 ì ATTACH ACCEPTî 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.

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 ì 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.

h)	GSM/UMTS.

Change in Clause 5.1.13

## 5.1.13	Successful combined GPRS/IMSI attach procedures

a)	This measurement provides the number of successfully performed ~~completed~~ combined GPRS/IMSI attach procedures ~~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 "Combined GPRS/IMSI attach". If the ìATTACH 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.

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 ìInter-RAT handoverî measurements	4.6.0	4.7.0
Jun 2004	S_24	SP-040267	033	--	Correction of ìRAB assignmentî measurements	4.6.0	4.7.0
Jun 2004	S_24	SP-040269	036	--	Correction of ìhard handoverî measurement definitions	4.6.0	4.7.0

CR-Form-v7

CHANGE REQUEST

⌘	**32.403** CR **047**	⌘**rev**	**-**	⌘	Current version:	**5.7.0**	⌘

*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 **X**

Title: ⌘	Correction of ìMobility Managementî GPRS attach measurement definitions	
Source: ⌘	**SA5** (llrui@bupt.edu.cn, liyewen@chinamobile.com)	
Work item code:⌘	OAM-PM	***Date:*** ⌘ 02/07/2004

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)*

Reason for change: ⌘	In ìMobility Managementî for GPRS services, there are three types of attach procedures, i.e. ìGPRS attach proceduresî, ìGPRS attach procedures with IMSI already attachedî and ìcombined GPRS/IMSI attach proceduresî. For this three types of attach procedures, if the attach procedure was accepted, the PS CN will send ìATTACH ACCEPTî message to AN, start the timer and wait for the ìATTACH COMPLETEî message from AN. If the timer expired before receiving the ìATTACH 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:⌘	Correct the ìSuccessful GPRS attach proceduresî, ìSuccessful GPRS attach procedures with IMSI already attachedî and ìSuccessful 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: ⌘	5.1.2, 5.1.10, 5.1.13

		Y	N			
Other specs affected:	⌘		X	Other core specifications	⌘	
			X	Test specifications		
		X		O&M Specifications		Rel-6 32.403

Other comments: ⌘	Rel-5 Mirror CR to S5-048563.

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 ì ATTACH ACCEPTî 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.

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 ì 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.

h)   GSM/UMTS.

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End of Change in Clause 5.1.10

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Change in Clause 5.1.13

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5.1.13   Successful combined GPRS/IMSI attach procedures

a) This measurement provides the number of successfully performed ~~completed~~ combined GPRS/IMSI attach procedures ~~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 "Combined GPRS/IMSI attach". If the ì 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.

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End of Change in Clause 5.1.13
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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 ìoutgoing intra-cell hard handovers measurementsî	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 ìInter-RAT handoverî measurements	5.6.0	5.7.0
Jun 2004	S_24	SP-040267	034	--	Correction of ìRAB assignmentî measurements	5.6.0	5.7.0
Jun 2004	S_24	SP-040269	037	--	Correction of ìhard handoverî measurement definitions	5.6.0	5.7.0

CR-Form-v7

CHANGE REQUEST

| ⌘ | **32.403** CR **048** | ⌘**rev** | **-** | ⌘ | Current version: | **6.4.0** | ⌘ |

*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 **X**

Title: ⌘	Correction of ìMobility Managementî GPRS attach measurement definitions	
Source: ⌘	**SA5** (llrui@bupt.edu.cn, liyewen@chinamobile.com)	
Work item code: ⌘	OAM-PM ***Date:*** ⌘	02/07/2004

Category: ⌘	**A**	***Release:*** ⌘ Rel-6

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: ⌘	In ìMobility Managementî for GPRS services, there are three types of attach procedures, i.e. ìGPRS attach proceduresî, ìGPRS attach procedures with IMSI already attachedî and ìcombined GPRS/IMSI attach proceduresî. For this three types of attach procedures, if the attach procedure was accepted, the PS CN will send ìATTACH ACCEPTî message to AN, start the timer and wait for the ìATTACH COMPLETEî message from AN. If the timer expired before receiving the ìATTACH 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: ⌘	Correct the ìSuccessful GPRS attach proceduresî, ìSuccessful GPRS attach procedures with IMSI already attachedî and ìSuccessful 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: ⌘	5.1.2, 5.1.10, 5.1.13

	Y	**N**	
Other specs affected: ⌘		**X**	Other core specifications ⌘
		X	Test specifications
		X	O&M Specifications

Other comments: ⌘	Rel-6 Mirror CR to S5-048563.

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 ì ATTACH ACCEPTî 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.

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 ì 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.

h) GSM/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 performed ~~completed~~ combined GPRS/IMSI attach procedures ~~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 "Combined GPRS/IMSI attach". If the ì 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 ìoutgoing intra-cell hard handovers measurementsî	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 ìInter-RAT handoverî measurements	6.3.0	6.4.0
Jun 2004	S_24	SP-040267	035	--	Correction of ìRAB assignmentî measurements	6.3.0	6.4.0
Jun 2004	S_24	SP-040269	038	--	Correction of ìhard 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