Source: **SA5 (Telecom Management)**

Title: **2 Rel-5 CR 32.642/52 (UTRAN/ GERAN network resources IRP: Network Resource Model) : Add missing notification notifyPotentialFaultyAlarmlist**

Document for: **Decision**

Agenda Item: **7.5.3**

Doc-1st-	Spec	CR	Phase	Subject	Cat	Version-	Doc-2nd-Level	Status-2nd-	WI
SP-030641	32.642	017	Rel-5	Add missing notification notifyPotentialFaultyAlarmlist	F	5.2.0	S5-038789	Agreed	OAM-NIM
SP-030641	32.652	016	Rel-5	Add missing notification notifyPotentialFaultyAlarmlist	F	5.2.0	S5-038790	Agreed	OAM-NIM

CR-Form-v7

CHANGE REQUEST

⌘ 32.642 CR 017 ⌘rev - ⌘ 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 X Core Network ☐

Title:	⌘	Add missing notification *notifyPotentialFaultyAlarmlist*
Source:	⌘	**SA5** (olaf.pollakowski@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	21/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

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:	⌘	The notification notification *notifyPotentialFaultyAlarmlist* is missing in the notification tables.
Summary of change:	⌘	The notification notification *notifyPotentialFaultyAlarmlist* is added to the notification tables
Consequences if not approved:	⌘	The notification *notifyPotentialFaultyAlarmlist* is not supported.

Clauses affected:	⌘	6.3

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

Other comments:	⌘	

Change in Clause 6.3

6.3 Information object classes definition

6.3.1 RncFunction

6.3.1.1 Definition

This IOC represents RNC functionality. For more information about the RNC, see 3GPP TS 23.002 [15].

6.3.1.2 Attributes

Table 6.1: Attributes of RncFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
rncFunctionId	+	M	M	-
userLabel	+	M	M	M
mcc	+	M	M	M
mnc	+	M	M	M
rncId	+	M	M	M

Table 6.2: Notifications of `RncFunction`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.2 NodeBFunction

6.3.2.1 Definition

This IOC represents Node B functionality. For more information about the Node B, see 3GPP TS 23.002 [15].

6.3.2.2 Attributes

Table 6.3: Attributes of NodeBFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
nodeBFunctionId	+	M	M	-
userLabel	+	M	M	M
nodeBFunction-IubLink	+	M	M	-

Table 6.4 Notifications of `NodeBFunction`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.3 UtranCell

6.3.3.1 Definition

This IOC represents a radio cell controlled by the RNC. For more information about radio cells, see 3GPP TS 23.002 [15].

6.3.3.2 Attributes

Table 6.5: Attributes of UtranCell

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
utranCellId	+	M	M	-
userLabel	+	M	M	M
cId	+	M	M	M
localCellId	+	M	M	M
uarfcnUl	+	M	M	M
uarfcnDl	+	M	M	M
primaryScramblingCode	+	M	M	M
primaryCpichPower	+	M	M	M
maximumTransmissionPower	+	M	M	M
primarySchPower	+	M	M	M
secondarySchPower	+	M	M	M
bchPower	+	M	M	M
lac	+	M	M	M
rac	+	M	M	M
sac	+	M	M	M
ura	+	M	M	M
utranCell-IubLink	+	M	M	-

Table 6.6: Additional attributes of UtranCell for the support of the State Management IRP

Attribute Name	Support Qualifier	READ	WRITE
operationalState	O	M	–
NOTE: No state propagation shall be implied.			

Table 6.7: Notifications of `UtranCell`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.4 IubLink

6.3.4.1 Definition

This IOC represents the logical link to a Node B as seen from the RNC. For more information about the RNC, see 3GPP TS 23.002 [15].

6.3.4.2 Attributes

Table 6.8: Attributes of IubLink

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
iubLinkId	+	M	M	-
userLabel	+	M	M	M
iubLink-UtranCell	+	M	M	M
iubLink-NodeBFunction	+	M	M	-

Table 6.9: Notifications of `IubLink`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.5 UtranRelation

6.3.5.1 Definition

The "UtranRelation" IOC contains radio network related parameters for the relation to the "UtranCell" or "ExternalUtranCell" IOC.

NOTE: In handover relation terms, the cell containing the UTRAN Relation object is the source cell for the handover. The cell referred to in the UTRAN relation object is the target cell for the handover. This defines a one-way handover relation where the direction is *from* source cell *to* target cell.

6.3.5.2 Attributes

Table 6.10: Attributes of UtranRelation

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
utranRelationId	+	M	M	-
adjacentCell	+	M	M	M
uarfcnUl	+	O	M	-
uarfcnDl	+	O	M	-
primaryScramblingCode	+	O	M	-
primaryCpichPower	+	O	M	-
lac	+	O	M	-

Table 6.11: Notifications of `UtranRelation`

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

6.3.5.3 Attribute constraints

The optionally attributes uarfcnUl, uarfcnDl, primaryScramblingCode, primaryCpichPower and lac shall be included if the EM does not guarantee consistency between the cell definition and what is broadcast on system information. Otherwise they shall not be included.

6.3.6 ExternalUtranCell

6.3.6.1 Definition

This IOC represents a radio cell controlled by another IRPAgent. This IOC has necessary attributes for inter-system handover. It contains a subset of the attributes of related IOCs controlled by another IRPAgent. The way to maintain consistency between the attribute values of these two IOCs is outside the scope of this document.

6.3.6.2 Attributes

Table 6.12: Attributes of ExternalUtranCell

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
externalUtranCellId	+	M	M	-
userLabel	+	M	M	M
cId	+	M	M	M
mcc	+	M	M	M
mnc	+	M	M	M
rncId	+	M	M	M
uarfcnUl	+	M	M	M
uarfcnDl	+	M	M	M
primaryScramblingCode	+	M	M	M
primaryCpichPower	+	M	M	M
lac	+	M	M	M
rac	+	M	M	M

Table 6.13: Notifications of `ExternalUtranCell`

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

End of Change in Clause 6.3
End of Document

Annex B (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2001	S_12	SP-010283	--	--	Approved at TSG SA #12 and placed under Change Control	2.0.0	4.0.0
Jun 2002	S_16	SP-020303	001	--	Corrections of reference in figure 6.2 and of attribute descriptions in UtranRelation in 32.642 (UTRAN network resources IRP: NRM)	4.0.0	4.1.0
Jun 2002	S_16	SP-020304	002	--	Correction of supported IRP in system context	4.0.0	4.1.0
Sep 2002	S_17	SP-020490	003	--	UML corrections	4.1.0	4.2.0
Sep 2002	S_17	SP-020492	004	--	Add the new IRP IS methodology defined in 32.102	4.2.0	5.0.0
Sep 2002	S_17	SP-020492	005	--	Add State Management	4.2.0	5.0.0
Dec 2002	S_18	SP-020748	006	--	Inclusion of valid values and ranges for UTRAN Cell parameters	5.0.0	5.1.0
Jan 2003	--	--	--	--	Accepted all revision marks	5.1.0	5.1.1
Jun 2003	S_20	SP-030282	008	--	Include notification tables	5.1.1	5.2.0
Jun 2003	S_20	SP-030282	010	--	Correction of UML diagram vsDataContainer Containment/Naming and Association in UTRAN NRM	5.1.1	5.2.0
Jun 2003	S_20	SP-030283	012	--	Deletion of UTRAN attribute relationType	5.1.1	5.2.0

CR-Form-v7

CHANGE REQUEST

⌘ 32.652 CR 016 ⌘rev - ⌘ 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 X Core Network ☐

Title:	⌘	Add missing notification *notifyPotentialFaultyAlarmlist*
Source:	⌘	**SA5** (olaf.pollakowski@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	21/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

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:	⌘	The notification notification *notifyPotentialFaultyAlarmlist* is missing in the notification tables.
Summary of change:	⌘	The notification notification *notifyPotentialFaultyAlarmlist* is added to the notification tables
Consequences if not approved:	⌘	The notification *notifyPotentialFaultyAlarmlist* is not supported.

Clauses affected:	⌘	6.3

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

Other comments:	⌘	

Change in Clause 6.3

6.3 Information object classes definition

6.3.1 BssFunction

6.3.1.1 Definition

This IOC represents BSS functionality. For more information about the BSS, see GSM 03.02 [16].

6.3.1.2 Attributes

Table 6.1: Attributes of BssFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
bssFunctionId	+	M	M	-
userLabel	+	M	M	M

Table 6.2: Notifications of `BssFunction`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.2 BtsSiteMgr

6.3.2.1 Definition

The "BtsSiteMgr" IOC contains site specific information for a BTS site.

6.3.2.2 Attributes

Table 6.3a: Attributes of BtsSiteMgr

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
btsSiteMgrId	+	M	M	-
userLabel	+	M	M	M
latitude	+	O	M	M
longitude	+	O	M	M

Table 6.3b: Additional attributes of BtsSiteMgr for the support of the State Management IRP

Attribute Name	Support Qualifier	READ	WRITE
operationalState	O	M	—
NOTE: No state propagation shall be implied.			

Table 6.4: Notifications of `BtsSiteMgr`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.3 GsmCell

6.3.3.1 Definition

This IOC represents the GSM radio cell. The applicability of instantiation of this class is depending on the ME type. It may only be instantiated under ME of type BSC.

6.3.3.2 Attributes

Table 6.5: Attributes of GsmCell

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
gsmCellId	+	M	M	-
userLabel	+	M	M	M
cellIdentity	+	M	M	M
cellAllocation	+	M	M	M
ncc	+	M	M	M
bcc	+	M	M	M
lac	+	M	M	M
mcc	+	M	M	M
mnc	+	M	M	M
rac	+	O	M	M
racc	+	O	M	M
tsc	+	M	M	M
rxLevAccessMin	+	M	M	M
msTxPwrMaxCCH	+	M	M	M
hoppingSequenceNumber	+	M	M	M
plmnPermitted	+	M	M	M

Table 6.6: Notifications of `GsmCell`

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAttributeValueChange	O	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyObjectCreation	O	
notifyObjectDeletion	O	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [11])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [11])	

6.3.3.3 Attribute constraints

The optionally attributes rac and racc shall be included if the cell is a GPRS cell. Otherwise they shall not be included.

6.3.4 GsmRelation

6.3.4.1 Definition

The "GsmRelation" IOC contains radio network related parameters for the relation to the "GsmCell" or "ExternalGsmCell" managed object. Note: In handover relation terms, the cell containing the GSM Relation object is the source cell for the handover. The cell referred to in the GSM relation object is the target cell for the handover. This defines a one-way handover relation where the direction is *from* source cell *to* target cell.

6.3.4.2 Attributes

Table 6.7: Attributes of GsmRelation

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
gsmRelationId	+	M	M	-
adjacentCell	+	M	M	M
bcchFrequency	+	O	M	-
ncc	+	O	M	-
bcc	+	O	M	-
lac	+	O	M	-

Table 6.8: Notifications of `GsmRelation`

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

6.3.4.3 Attribute constraints

The optionally attributes bcchFrequency, ncc, bcc and lac shall be included if the EM does not guarantee consistency between the cell definition and what is broadcasted on system information. Otherwise they shall not be included.

6.3.5 ExternalGsmCell

6.3.5.1 Definition

This IOC represents a radio cell controlled by another IRPAgent. This IOC has necessary attributes for inter-system handover. It contains a subset of the attributes of related IOCs controlled by another IRPAgent. To maintain the consistency between the attribute values of these two IOCs is outside the scope of this document.

6.3.5.2 Attributes

Table 6.9: Attributes of ExternalGsmCell

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
externalGsmCellId	+	M	M	-
userLabel	+	M	M	M
cellIdentity	+	M	M	M
bcchFrequency	+	M	M	M
ncc	+	M	M	M
bcc	+	M	M	M
lac	+	M	M	M
mcc	+	M	M	M
mnc	+	M	M	M
rac	+	O	M	M
racc	+	O	M	M

Table 6.10: Notifications of `ExternalGsmCell`

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

6.3.5.3 Attribute constraints

The optionally attributes rac and racc shall be included if the cell is a GPRS cell. Otherwise they shall not be included.

6.3.6 ExternalBssFunction

6.3.6.1 Definition

This IOC represents a BssFunction controlled by another IRPAgent. It contains a subset of the attributes of related IOCs controlled by another IRPAgent. To maintain the consistency between the attribute values of these two IOCs is outside the scope of the present document.

6.3.6.2 Attributes

Table 6.11: Attributes of ExternalBssFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
externalBssFunctionId	+	M	M	-
userLabel	+	M	M	M

Table 6.12: Notifications of `ExternalBssFunction`

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

6.3.6.3 Attribute constraints

None.

End of Change in Clause 6.3
End of Document

Annex A (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2001	S_12	SP-010283	--	--	Approved at TSG SA #12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	S_13	SP-010477	001	--	Addition of mcc and mnc in the object model of GERAN	4.0.0	4.1.0
Dec 2001	S_14	SP-010650	002	--	Correction of references	4.1.0	4.2.0
Jun 2002	S_16	SP-020305	003	--	Addition of the attributes mcc and mnc in the object model of GERAN	4.2.0	4.3.0
Jun 2002	S_16	SP-020305	004	--	Correction of attribute descriptions in the Managed Object Class (MOC) GsmRelation of 32.652 (GERAN network resources IRP: NRM)	4.2.0	4.3.0
Jun 2002	S_16	SP-020304	005	--	Correction of supported IRP in system context	4.2.0	4.3.0
Sep 2002	S_17	SP-020494	006	--	UML corrections	4.3.0	4.4.0
Sep 2002	S_17	SP-020496	007	--	Add State Management	4.4.0	5.0.0
Dec 2002	--	--	--	--	Cosmetics	5.0.0	5.0.1
Jun 2003	S_20	SP-030282	010	--	Include notification tables	5.0.1	5.1.0
Jun 2003	S_20	SP-030282	012	--	Correction of UML diagram vsDataContainer Containment/Naming and Association in GERAN NRM	5.0.1	5.1.0
Jun 2003	S_20	SP-030283	014	--	Deletion of GERAN attribute relationType	5.0.1	5.1.0
Sep 2003	S_21	SP-030418	015	--	Inclusion of External BSS Function in GERAN NRM - Alignment with 32.632	5.1.0	5.2.0