

**Source:** SA5 (Telecom Management)  
**Title:** 8 Rel-4/5 CR 32.642/652 (Configuration Management; UTRAN/GERAN network resources IRP: Network Resource Model)  
**Document for:** Approval  
**Agenda Item:** 7.5.3

Doc-1st-	Spec	CR	R	Ph	Subject	Cat	Ver	Doc-2nd-	Workite
SP-030282	32.642	007	-	Rel-4	Add missing notifications from all managed objects (notifyComments, notifyAlarmListRebuilt)	F	4.2.0	S5-036328	OAM-CM
SP-030282	32.642	008	-	Rel-5	Include notification tables	A	5.1.1	S5-036456	OAM-CM
SP-030282	32.642	009	-	Rel-4	Correction of UML diagram vsDataContainer Containment/Naming and Association in UTRAN NRM	F	4.2.0	S5-036670	OAM-CM
SP-030282	32.642	010	-	Rel-5	Correction of UML diagram vsDataContainer Containment/Naming and Association in UTRAN NRM	A	5.1.1	S5-036671	OAM-CM
SP-030282	32.652	009	-	Rel-4	Add missing notifications from all managed objects (notifyComments, notifyAlarmListRebuilt)	F	4.4.0	S5-036330	OAM-CM
SP-030282	32.652	010	-	Rel-5	Include notification tables	A	5.0.1	S5-036457	OAM-CM
SP-030282	32.652	011	-	Rel-4	Correction of UML diagram vsDataContainer Containment/Naming and Association in GERAN NRM	F	4.4.0	S5-036669	OAM-CM
SP-030282	32.652	012	-	Rel-5	Correction of UML diagram vsDataContainer Containment/Naming and Association in GERAN NRM	A	5.0.1	S5-036668	OAM-CM

## CHANGE REQUEST

⌘ **32.642 CR 007** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

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

<b>Title:</b>	⌘	Add missing notifications from all managed objects (notifyComments, notifyAlarmListRebuilt)
<b>Source:</b>	⌘	SA5
<b>Work item code:</b>	⌘	OAM-CM
		<b>Date:</b> ⌘ 28/02/2003
<b>Category:</b>	⌘	<b>F</b>
		<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p><i>Use <u>one</u> of the following categories:</i></p> <p><b>F</b> (correction)</p> <p><b>A</b> (corresponds to a correction in an earlier release)</p> <p><b>B</b> (addition of feature),</p> <p><b>C</b> (functional modification of feature)</p> <p><b>D</b> (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a>.</p> </div> <div style="width: 35%;"> <p><i>Use <u>one</u> of the following releases:</i></p> <p><b>2</b> (GSM Phase 2)</p> <p><b>R96</b> (Release 1996)</p> <p><b>R97</b> (Release 1997)</p> <p><b>R98</b> (Release 1998)</p> <p><b>R99</b> (Release 1999)</p> <p><b>Rel-4</b> (Release 4)</p> <p><b>Rel-5</b> (Release 5)</p> <p><b>Rel-6</b> (Release 6)</p> </div> </div>

<b>Reason for change:</b>	⌘	The notifyComments & notifyAlarmListRebuilt notifications are missing from all managed objects. They should be included in all managed objects that emit alarms.
<b>Summary of change:</b>	⌘	Add notifyComments & notifyAlarmListRebuilt notifications to all managed objects that emit alarms.
<b>Consequences if not approved:</b>	⌘	Inconsistent interfaces

<b>Clauses affected:</b>	⌘	6.3								
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;">X</td> <td style="width: 20px;"> </td> </tr> </table> Other core specifications      ⌘ Test specifications O&M Specifications              Rel-5 32.642	Y	N		X		X	X	
Y	N									
	X									
	X									
X										
<b>Other comments:</b>	⌘	Rel-5 Mirror CR 32.642 is attached in S5-036456.								

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

<b>Change in Clause 6.3</b>
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### 6.3.1 MOC RncFunction

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**Table 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])	

### 6.3.2 MOC NodeBFunction

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**Table 4: Notifications of NodeBFunction**

Name	Qualifier	Notes
notifyAckStateChanged	M, 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])	

### 6.3.3 MOC UtranCell

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**Table 6: 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])	

### 6.3.4 MOC IubLink

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**Table 8: Notifications of lubLink**

<b>Name</b>	<b>Qualifier</b>	<b>Notes</b>
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])	

**End of Change in Clause 6.3**  
**End of Document**

## CHANGE REQUEST

⌘ **32.652 CR 012** ⌘ rev - ⌘ Current version: **5.0.1** ⌘

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

<b>Title:</b>	⌘ Correction of UML diagram vsDataContainer Containment/Naming and Association in GERAN NRM				
<b>Source:</b>	⌘ S5 Ericsson (robert.petersen@era.ericsson.se)				
<b>Work item code:</b>	⌘ OAM-CM	<b>Date:</b>	⌘ 23/05/2003		
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-5		
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:		
	<b>F</b> (correction)		<b>2</b> (GSM Phase 2)		
	<b>A</b> (corresponds to a correction in an earlier release)		<b>R96</b> (Release 1996)		
	<b>B</b> (addition of feature),		<b>R97</b> (Release 1997)		
	<b>C</b> (functional modification of feature)		<b>R98</b> (Release 1998)		
	<b>D</b> (editorial modification)		<b>R99</b> (Release 1999)		
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		<b>Rel-4</b> (Release 4)		
			<b>Rel-5</b> (Release 5)		
			<b>Rel-6</b> (Release 6)		

<b>Reason for change:</b>	⌘ The diagram does not follow UML conventions
<b>Summary of change:</b>	⌘ The diagram is made UML compliant. Editorial changes are made.
<b>Consequences if not approved:</b>	⌘ The interpretation of the diagram would not be unambiguous.

<b>Clauses affected:</b>	⌘ 1, 4.1, 4.2, 6.2.1, 6.3.1.2, 6.3.2.2, 6.3.3.2, 6.3.4.2, 6.3.5.2, 6.4.1.1, 6.4.2.1 and 6.5.1.				
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"><input type="checkbox"/></td> <td style="width: 20px;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications ⌘	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Y	N				
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	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;"><input type="checkbox"/></td> <td style="width: 20px;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications ⌘	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;"><input type="checkbox"/></td> <td style="width: 20px;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications ⌘	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
<b>Other comments:</b>	⌘ Rel-5 Mirror of Rel-4 CR 32.652 attached in S5-036669.				

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

## Change in Clause 1

### 1 Scope

The present document is part of an Integration Reference Point (IRP) named "GERAN Network Resources IRP", through which an "IRP Agent" (typically an Element Manager or Network Element) can communicate Configuration Management information to one or several "IRP Managers" (typically Network Managers) concerning GERAN resources. The "GERAN Network Resources IRP" comprises a set of specifications defining Requirements, a protocol neutral Network Resource Model (NRM) and corresponding Solution Set(s).

The present document specifies the protocol neutral GERAN Network Resources IRP: Network Resource Model. It reuses relevant parts of the generic NRM in TS 32.622 [16], either by direct reuse or sub-classing, and in addition to that defines GERAN specific Managed Object Classes.

The Configuration Management (CM) area is very large. The intention is to split the specification of the related interfaces in several IRPs – as described in the Introduction clause above. An important aspect of such a split is that the Network Resource Models (NRMs) defined in different IRPs containing NRMs are consistent, and that NRMs supported by an IRP Agent implementation can be accessed as one coherent model through one IRP Information Service.

To summarize, the present document has following main purpose: to define the applied GERAN specific Network Resource Model, based on the generic NRM in TS 32.622 [16].

In order to access the information defined by this NRM, an IRP Information Service (IS) is needed, such as the Basic CM IRP: IS (TS 32.602 [17]) or the Bulk CM IRP: IS (TS 32.612 [18]). However, which Information Service that is applicable is outside the scope of this document.

Finally, regarding the support of the State Management IRP: IS (TS 32.672 [8]), all NRM's of one release shall support the same State Management IRP version. This NRM specification is related to TS 32.672 V5.0.X.

## End of Change in Clause 1

**Change in Clause 4.1**

## 4.1 System context

Figure 4.1 and 4.2 identify system contexts of the IRP defined by the present [document specification](#) in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].

The IRPAgent implements and supports this IRP. The IRPAgent can reside in an Element Manager (EM; for definition see 3GPP TS 32.101 [1]) or a Network Element (NE) (see also [2] clause 8). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs is not the subject of this IRP.

~~Figure 4.1 and 4.2 identify system contexts of the subject IRP in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].~~

~~The IRPAgent implements and supports the Basic CM IRP. The IRPAgent can be an Element Manager (EM) or a mediator that interfaces one or more NEs (see Figure 4.1), or it can be a Network Element (NE) (see Figure 4.2). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs are not subject of this IRP.~~

An IRPManager using this IRP shall choose one of the two System Contexts defined here, for each NE. For instance, if an EM is responsible for managing a number of NEs, the NM shall access this IRP through the EM and not directly to those NEs. For another IRP though, the System Context may be different.

...

**Figure 4.2: System Context B**

**End of Change in Clause 4.1**

**Change in Clause 4.2**

## 4.2 Compliance rules

For general definitions of compliance rules related to qualifiers (Mandatory/Optional/Conditional) for *operations, notifications and parameters* (of operations and notifications) please refer to 3GPP TS 32.102 [2].

The following defines the meaning of Mandatory and Optional IOC attributes and associations between IOCs, in Solution Sets to the IRP defined by the present ~~document~~[specification](#):

- The IRPManager shall support all mandatory attributes/associations. The IRPManager shall be prepared to receive information related to mandatory as well as optional attributes/associations without failure; however the IRPManager does not have to support handling of the optional attributes/associations.
- The IRPAgent shall support all mandatory attributes/associations. It may support optional attributes/associations.

...

**End of Change in Clause 4.2**



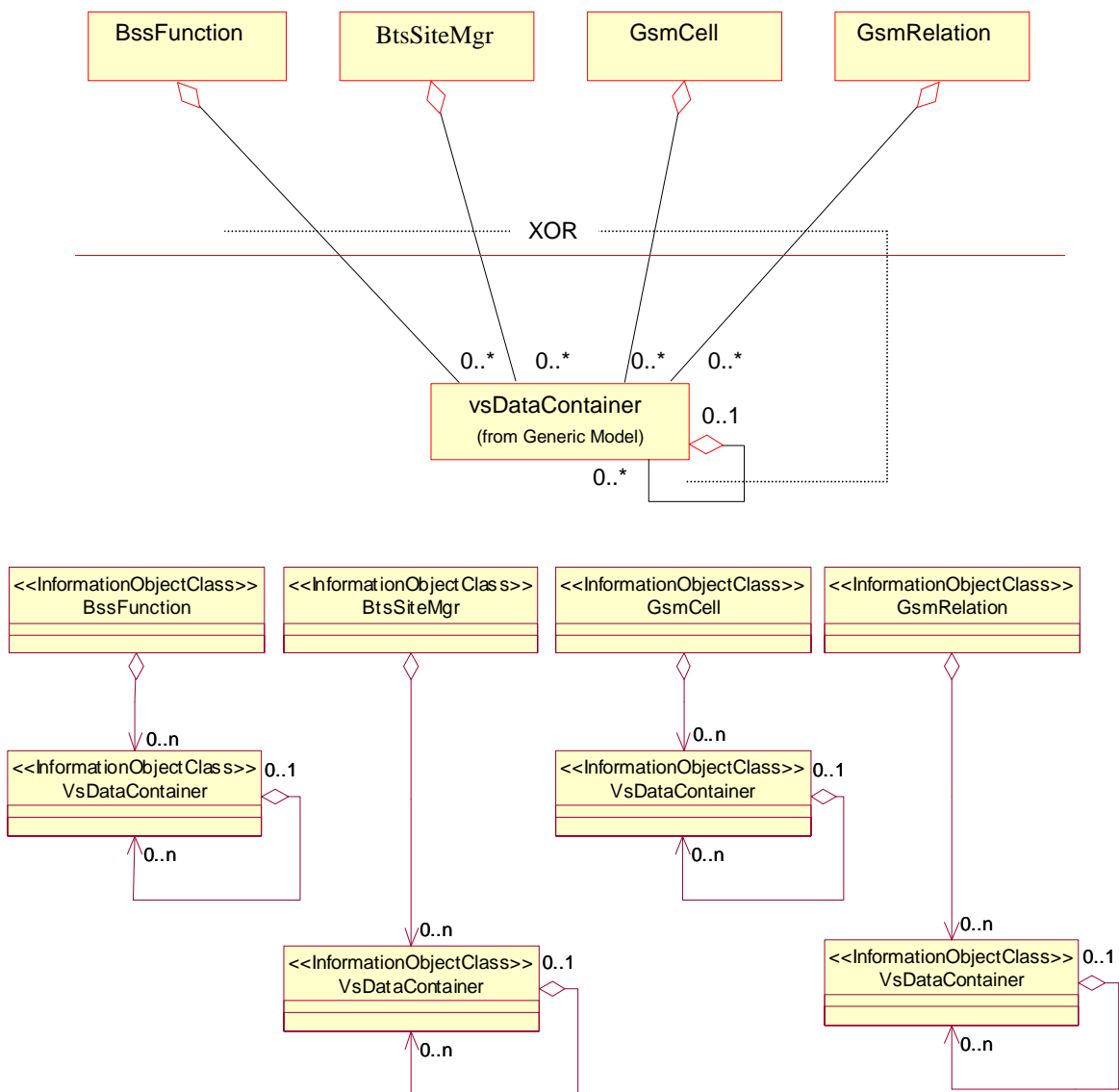
**Change in Clause 6.2.1**

### 6.2.1 Attributes and relationships

...

NOTE 4: The ~~GeranRelation~~ ~~GsmRelation~~ and UtranRelation can be contained under IOCs defined in other NRMs.

**Figure 6.2.1-1: GERAN NRM Containment/Naming and Association diagram**



NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.

NOTE 2: Each instance of the vsDataContainer shall only be contained under one MOC. The vsDataContainer can be contained under MOCs defined in other NRMs.

**Figure 6.2.1-2: GERAN NRM Containment/Naming and Association diagram**

**End of Change in Clause 6.2.1**

### Change in Clause 6.3.1.2

#### 6.3.1.2 Attributes

**Table 1: Attributes of BssFunction**

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

### End of Change in Clause 6.3.1.2

### Change in Clause 6.3.2.2

#### 6.3.2.2 Attributes

**Table 2: 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

...

### End of Change in Clause 6.3.2.2

### Change in Clause 6.3.3.2

#### 6.3.3.2 Attributes

**Table 3: 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

### End of Change in Clause 6.3.3.2

### Change in Clause 6.3.4.2

#### 6.3.4.2 Attributes

**Table 4: Attributes of GsmRelation**

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

### End of Change in Clause 6.3.4.2

### Change in Clause 6.3.5.2

#### 6.3.5.2 Attributes

**Table 5: 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

### End of Change in Clause 6.3.5.2

### Change in Clause 6.4.1.1

#### 6.4.1.1 Definition

This represents a unidirectional relation from GsmRelation to the ExternalGsmCell. The role of the [IOC-relation](#) shall be mapped to a reference attribute, named adjacentCell, of the IOC.

### End of Change in Clause 6.4.1.1

**Change in Clause 6.4.2.1****6.4.2.1 Definition**

This represents the unidirectional relation from the GsmRelation to GsmCell. The role of the ~~IOC~~-relation shall be mapped to a reference attribute, named adjacentCell, of the IOC.

**End of Change in Clause 6.4.2.1****Change in Clause 6.5.1****6.5.1 Definition and legal values**

The table below defines the attributes that are present in several information object classes of this TS.

Table 6: Attributes

Attribute Name	Definition	Legal Values
adjacentCell	Pointer to GSM cell or external GSM cell. Distinguished Name of the corresponding object.	
bcc	<b>IOCs <u>GsmCell</u> and <u>ExternalGsmCell</u>:</b> Base station colour code, BCC (part of BSIC). Ref 3GPP TS 44.018 [4]. <b>IOC <u>GsmRelation</u>:</b> Base station colour code, BCC (part of BSIC. Ref 3GPP TS 44.018 [4]) for another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
bcchFrequency	<b>IOC <u>ExternalGsmCell</u>:</b> This attribute contains the absolute radio frequency channel number of the BCCH channel of the GSM cell. <b>IOC <u>GsmRelation</u>:</b> This attribute contains the absolute radio frequency channel number of the BCCH channel of another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
bssFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this</a> <a href="#">the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
btsSiteMgrid	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this</a> <a href="#">the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
cellAllocation	This attribute defines the set of radio frequencies allocated and available to a cell, the first element sets the BCCH frequency, Ref 3GPP TS 44.018 [4].	
cellIdentity	Cell Identity (Ref 3GPP TS 24.008 [3]).	
externalGsmCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this</a> <a href="#">the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gsmCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this</a> <a href="#">the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gsmRelationId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this</a> <a href="#">the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hoppingSequenceNumber	HoppingSequenceNumber. Attribute description reference 3GPP TS 45.002 [6] (HSN)	
lac	<b>IOCs <u>GsmCell</u> and <u>ExternalGsmCell</u>:</b> Location Area Code, LAC . Ref 3GPP TS 24.008 [3]. <b>IOC <u>GsmRelation</u>:</b> Location Area Code, LAC (Ref 3GPP TS 24.008 [3]) for another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
latitude	Used for geographical positioning of the sitemanager	
longitude	Used for geographical positioning of the sitemanager	
mcc	Mobile Country Code, MCC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [8]).	
mnc	Mobile Network Code, MNC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [8]).	
msTxPwrMaxCCH	Maximum Transmission Power for a Mobile Station on a CCH. Attribute description Ref 3GPP TS 45.008 [5] (MS_TXPWR_MAX_CCH)	
ncc	<b>IOCs <u>GsmCell</u> and <u>ExternalGsmCell</u>:</b> Network Colour Code, NCC (part of BSIC). Ref 3GPP TS 44.018 [4]. <b>IOC <u>GsmRelation</u>:</b> Network Colour Code, NCC (part of BSIC. Ref 3GPP TS 44.018 [4]) for another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
plmnPermitted	Network Colour Code Permitted. Attribute description reference 3GPP TS 45.008 [5] (NCC_PERMITTED)	
rac	Routing Area Code, RAC. Ref 3GPP TS 44.018 [4].	
racc	Routing Area Colour Code, RACC. Ref 3GPP TS 44.018 [4].	
relationType	Type of relation: e.g. Intersystem relation, intra system relation.	
rxLevAccessMin	Minimum Access Level. Attribute description Ref 3GPP TS 45.008 [5] (RXLEV_ACCESS_MIN)	
tsc	Training Sequence Code, an attribute of the class channel in Ref 3GPP TS 44.018 [4]	
userLabel	<b>IOC <u>BssFunction</u>:</b> A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction. <b>Other IOCs:</b> A user-friendly (and user assigned) name of the associated object.	

**End of Change in Clause 6.5.1**  
**End of Document**

## CHANGE REQUEST

⌘ **32.652 CR 011** ⌘ rev **-** ⌘ Current version: **4.4.0** ⌘

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

<b>Title:</b>	⌘	Correction of UML diagram vsDataContainer Containment/Naming and Association in GERAN NRM	
<b>Source:</b>	⌘	S5 Ericsson (robert.petersen@era.ericsson.se)	
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b> ⌘ 23/05/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b> ⌘ Rel-4
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	The diagram does not follow UML conventions	
<b>Summary of change:</b>	⌘	The diagram is made UML compliant. Editorial changes are made	
<b>Consequences if not approved:</b>	⌘	The interpretation of the diagram would not be unambiguous.	

<b>Clauses affected:</b>	⌘	Introduction, 1, 3.1, 4.1, and 6.2.2.									
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;">X</td> <td style="width: 20px;"> </td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ Rel-5 32.652	Y	N		X		X	X		
Y	N										
	X										
	X										
X											
<b>Other comments:</b>	⌘	Rel-5 Mirror CR 32.652 attached in S5-036668.									

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

## Change in Introduction

### Introduction

...

Due to the growing number of specifications to model new services and Resource Models for Configuration Management (CM), as well as the expected growth in size of each of them from 3GPP Release 4 onwards, a new structure of the specifications is already needed in Release 4. This structure is needed for several reasons, but mainly to enable more independent development and release for each part, as well as a simpler document identification and version handling. Another benefit would be that it becomes easier for bodies outside 3GPP, such as the ITU-T, to refer to telecom management specifications from 3GPP. The new structure of the specifications does not lose any information or functionality supported by the Release 1999. The restructuring also includes defining new IRPs for the Network Resource Model (NRM) parts of R99 Basic CM IRP (Generic, Core Network and UTRAN NRM). These IRPs are named [“Network Resources IRP”](#).

Further, the Notification IRP (in Release 1999: 32.106-1 to -4) and the Name convention for Managed Objects (in Release 1999: 32.106-8) have been moved to a separate number series used for specifications common between several management areas (e.g. CM, FM, PM).

...

## End of Change in Introduction

## Change in Clause 1

### 1 Scope

The present document is part of an Integration Reference Point (IRP) named [“GERAN Network Resources IRP”](#), through which an 'IRPAgent' (typically an Element Manager or Network Element) can communicate Configuration Management information to one or several 'IRPManagers' (typically Network Managers) concerning GERAN resources. The [“GERAN Network Resources IRP”](#) comprises a set of specifications defining Requirements, a protocol neutral Network Resource Model (NRM) and corresponding Solution Set(s).

...

## End of Change in Clause 1



### Change in Clause 3.1

## 3.1 Definitions

...

**Managed Object (MO):** In the context of the present document, a Managed Object (MO) is a software object that encapsulates the manageable characteristics and behaviour of a particular Network Resource. The MO is instance of a MO class defined in a MIM/NRM. An MO class has attributes that provide information used to characterize the objects that belong to the class (the term "attribute" is taken from TMN and corresponds to a "property" according to CIM). Furthermore, an MO class can have operations that represent the behaviour relevant for that class (the term "operation" is taken from TMN and corresponds to a "method" according to CIM). An MO class may support notifications that provide information about an event occurrence within a network resource.

...

**Network Resource Model (NRM):** A model representing the actual managed telecommunications network resources that a System is providing through the subject IRP. An NRM describes Managed Object Classes, their associations, attributes and operations. The NRM is also referred to as "MIM" (see above), which originates from the ITU-T TMN.

...

### End of Change in Clause 3.1

### Change in Clause 4.1

## 4.1 System context

Figure 4.1 and 4.2 identify system contexts of the IRP defined by the present ~~document~~ specification in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].

The IRPAgent implements and supports this IRP. The IRPAgent can reside in an Element Manager (EM; for definition see 3GPP TS 32.101 [1]) or a Network Element (NE) (see also [2] clause 8). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs is not the subject of this IRP.

~~Figure 4.1 and 4.2 identify system contexts of the subject IRP in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].~~

~~The IRPAgent implements and supports the Basic CM IRP. The IRPAgent can be an Element Manager (EM) or a mediator that interfaces one or more NEs (see Figure 4.1), or it can be a Network Element (NE) (see Figure 4.2). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs are not subject of this IRP.~~

An IRPManager using this IRP shall choose one of the two System Contexts defined here, for each NE. For instance, if an EM is responsible for managing a number of NEs, the NM shall access this IRP through the EM and not directly to those NEs. For another IRP though, the System Context may be different.

...

### End of Change in Clause 4.1

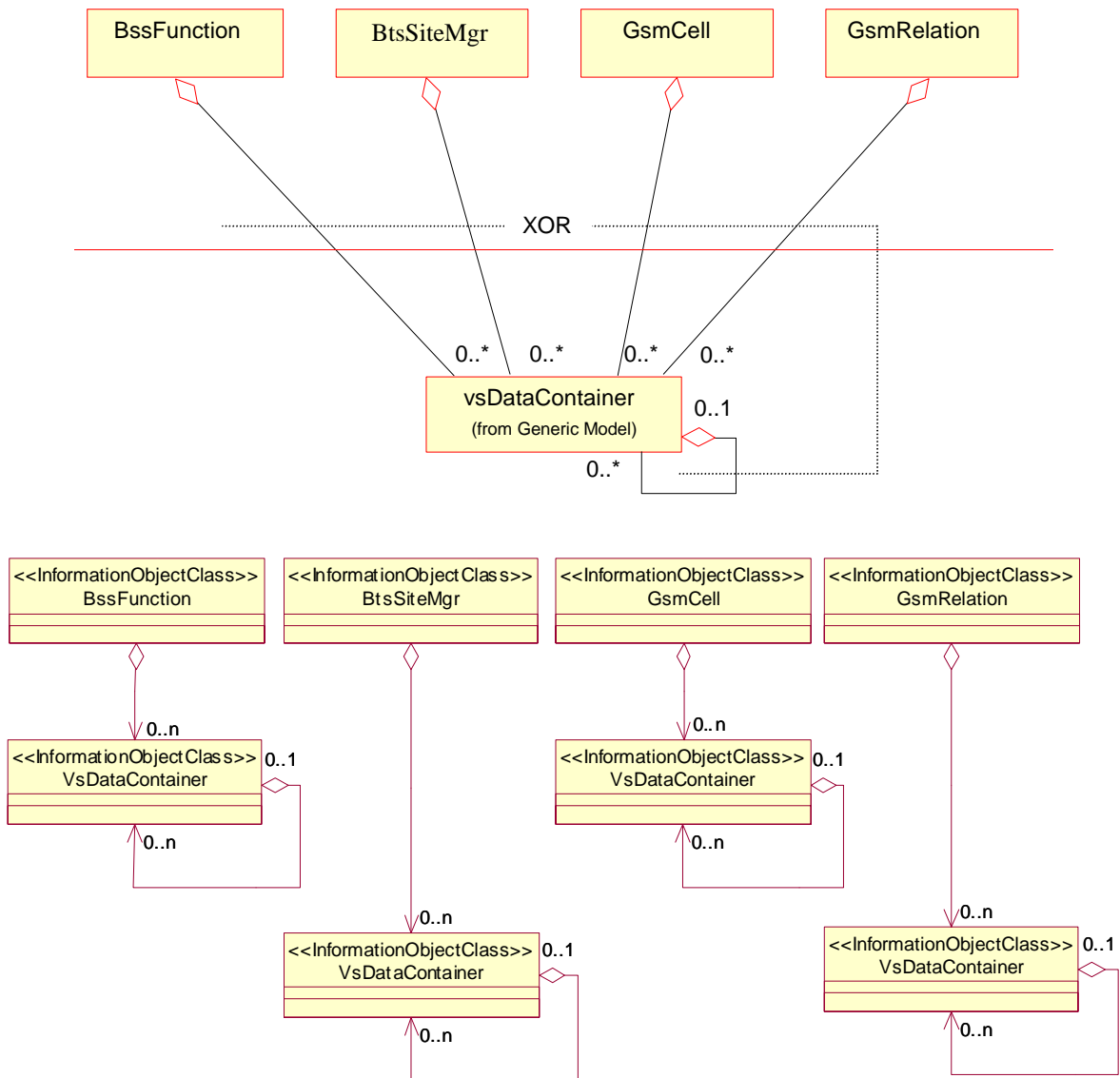
**Change in Clause 6.2.2**

**6.2.2 Containment/Naming and Association diagrams**

...

NOTE 4: The ~~GeranRelation~~ ~~GsmRelation~~ and UtranRelation can be contained under MOCs defined in other NRMs.

**Figure 6.2: GERAN NRM Containment/Naming and Association diagram**



NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.

NOTE 2: Each instance of the vsDataContainer shall only be contained under one MOC. The vsDataContainer can be contained under MOCs defined in other NRMs.

**Figure 6: GERAN NRM Containment/Naming and Association diagram**

**End of Change in Clause 6.2.2  
End of Document**

## CHANGE REQUEST

⌘ **32.652 CR 010** ⌘ rev **-** ⌘ Current version: **5.0.1** ⌘

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

<b>Title:</b>	⌘	Include notification tables	
<b>Source:</b>	⌘	S5	
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>A</b>	<b>Release:</b> ⌘ Rel-5
		Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
		<b>F</b> (correction)	2 (GSM Phase 2)
		<b>A</b> (corresponds to a correction in an earlier release)	R96 (Release 1996)
		<b>B</b> (addition of feature),	R97 (Release 1997)
		<b>C</b> (functional modification of feature)	R98 (Release 1998)
		<b>D</b> (editorial modification)	R99 (Release 1999)
		Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘	To include the tables for notifications for the IOCs.
<b>Summary of change:</b>	⌘	The notification tables from Rel-4 are included for the IOCs, including notifyComments and notifyAlarmListRebuilt. The reference to reference [8] has been changed to [9].
<b>Consequences if not approved:</b>	⌘	The specification would not show which notifications an IOC supports.

<b>Clauses affected:</b>	⌘	1, 6.3.1.2, 6.3.2.2, 6.3.3.2, 6.3.4.2, 6.3.5.2, 6.4.1.2, 6.4.2.2 and 6.5.1								
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; vertical-align: middle;"> <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;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications      ⌘ Test specifications O&M Specifications	Y	N		X		X		X
Y	N									
	X									
	X									
	X									
<b>Other comments:</b>	⌘	Rel-5 Mirror of Rel-4 CR 32.652 attached in S5-036330.								

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

## Change in Clause 1

### 1 Scope

The present document is part of an Integration Reference Point (IRP) named "GERAN Network Resources IRP", through which an "IRPAgent" (typically an Element Manager or Network Element) can communicate Configuration Management information to one or several "IRPManagers" (typically Network Managers) concerning GERAN resources. The "GERAN Network Resources IRP" comprises a set of specifications defining Requirements, a protocol neutral Network Resource Model (NRM) and corresponding Solution Set(s).

The present document specifies the protocol neutral GERAN Network Resources IRP: Network Resource Model. It reuses relevant parts of the generic NRM in TS 32.622 [16], either by direct reuse or sub-classing, and in addition to that defines GERAN specific Managed Object Classes.

The Configuration Management (CM) area is very large. The intention is to split the specification of the related interfaces in several IRPs – as described in the Introduction clause above. An important aspect of such a split is that the Network Resource Models (NRMs) defined in different IRPs containing NRMs are consistent, and that NRMs supported by an IRPAgent implementation can be accessed as one coherent model through one IRP Information Service.

To summarize, the present document has following main purpose: to define the applied GERAN specific Network Resource Model, based on the generic NRM in TS 32.622 [16].

In order to access the information defined by this NRM, an IRP Information Service (IS) is needed, such as the Basic CM IRP: IS (TS 32.602 [17]) or the Bulk CM IRP: IS (TS 32.612 [18]). However, which Information Service that is applicable is outside the scope of this document.

Finally, regarding the support of the State Management IRP: IS (TS 32.672 [89]), all NRM-s of one release shall support the same State Management IRP version. This NRM specification is related to TS 32.672 V5.0.X.

## End of Change in Clause 1

<b>Change in Clause 6.3.1.2</b>
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## 6.3.1.2 Attributes

Table 1: Attributes of BssFunction

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

Table 2: Notifications of BssFunction

Name	Qualifier	Notes
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.1.2</b>
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<b>Change in Clause 6.3.2.2</b>
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## 6.3.2.2 Attributes

Table 23: 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 2a4: 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 5: Notifications of BtsSiteMgr

Name	Qualifier	Notes
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	O	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	O	
<a href="#">notifyObjectDeletion</a>	O	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.2.2</b>
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<b>Change in Clause 6.3.3.2</b>
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## 6.3.3.2 Attributes

Table 36: 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 7: Notifications of GsmCell

Name	Qualifier	Notes
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.3.2</b>
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**Change in Clause 6.3.4.2**

6.3.4.2 Attributes

**Table 48: Attributes of GsmRelation**

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

**Table 9: Notifications of GsmRelation**

Name	Qualifier	Notes
<a href="#">notifyAttributeValueChange</a>	<u>O</u>	
<a href="#">notifyObjectCreation</a>	<u>O</u>	
<a href="#">notifyObjectDeletion</a>	<u>O</u>	

**End of Change in Clause 6.3.4.2**

**Change in Clause 6.3.5.2**

6.3.5.2 Attributes

**Table 510: Attributes of ExternalGsmCell**

Attribute name	Visibility	Support Qualifier	Read Qualifer	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

**Table11: Notifications of ExternalGsmCell**

Name	Qualifier	Notes
<a href="#">notifyAttributeValueChange</a>	<u>O</u>	
<a href="#">notifyObjectCreation</a>	<u>O</u>	
<a href="#">notifyObjectDeletion</a>	<u>O</u>	

**End of Change in Clause 6.3.5.2**



**Change in Clause 6.4.1.2**

6.4.1.2 Roles

**Table 612: Roles of the relation ExternalGsmNeighbourCellRelation**

Name	Definition
gsmRelation-externalGsmNeighbourCell	This role (when present) represents GsmRelation capability to identify one ExternalGsmCell. When this role is present, the GsmRelation.adjacentCell shall contain one ExternalGsmNeighbourCell DN.

**End of Change in Clause 6.4.1.2**

**Change in Clause 6.4.2.2**

6.4.2.2 Roles

**Table 713: Roles of the relation GsmNeighbourCellRelation**

Name	Definition
gsmRelation-gsmNeighbourCell	This role (when present) represents GsmRelation capability to identify one GsmCell. When this role is present, the GsmRelation.adjacentCell shall contain one GsmCell DN.

**End of Change in Clause 6.4.2.2**

**Change in Clause 6.5.1**

6.5.1 Definition and legal values

....

**Table 614: Attributes**

Attribute Name	Definition	Legal Values
adjacentCell	Pointer to GSM cell or external GSM cell. Distinguished Name of the corresponding object.	
bcc	<u>IOCs <b>GsmCell</b> and <b>ExternalGsmCell</b>:</u> Base station colour code, BCC (part of BSIC). Ref 3GPP TS 44.018 [4]. <u>IOC <b>GsmRelation</b>:</u> Base station colour code, BCC (part of BSIC. Ref 3GPP TS 44.018 [4]) for another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
bcchFrequency	<u>IOC <b>ExternalGsmCell</b>:</u> This attribute contains the absolute radio frequency channel number of the BCCH channel of the GSM cell. <u>IOC <b>GsmRelation</b>:</u> This attribute contains the absolute radio frequency channel number of the BCCH channel of another GSM cell or the external GSM cell, that is broadcast in System Information in the Cell.	
...	...	

**End of Change in 6.5.1  
End of Document**

## CHANGE REQUEST

⌘ **32.652 CR 009** ⌘ rev **-** ⌘ Current version: **4.4.0** ⌘

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

<b>Title:</b>	⌘	Add missing notifications from all managed objects (notifyComments, notifyAlarmListRebuilt)		
<b>Source:</b>	⌘	S5		
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b>	⌘ 28/02/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b>	⌘ Rel-4
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	The notifyComments & notifyAlarmListRebuilt notifications are missing from all managed objects. They should be included in all managed objects that emit alarms.
<b>Summary of change:</b>	⌘	Add notifyComments & notifyAlarmListRebuilt notifications to all managed objects that emit alarms.
<b>Consequences if not approved:</b>	⌘	Inconsistent interfaces

<b>Clauses affected:</b>	⌘	6.3								
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"> </td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N		X		X	X	
Y	N									
	X									
	X									
X										
<b>Other comments:</b>	⌘	Rel-5 32.652 Rel-5 Mirror CR 32.652 attached in S5-036457.								

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

<b>Change in Clause 6.3</b>
-----------------------------

### 6.3.1 MOC BssFunction

...

**Table 3: 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	
<u>notifyComments</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	
<u>notifyAlarmListRebuilt</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	

### 6.3.2 MOC BtsSiteMgr

...

**Table 5: 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	
<u>notifyComments</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	
<u>notifyAlarmListRebuilt</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	

### 6.3.3 MOC GsmCell

...

**Table 7: 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	
<u>notifyComments</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	
<u>notifyAlarmListRebuilt</u>	<u>See Alarm IRP (3GPP TS 32.111-2 [11])</u>	

<b>End of Change in Clause 6.3</b>
<b>End of Document</b>

## CHANGE REQUEST

⌘ **32.642 CR 010** ⌘ rev - ⌘ Current version: **5.1.1** ⌘

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

<b>Title:</b>	⌘	Correction of UML diagram vsDataContainer Containment/Naming and Association in UTRAN NRM	
<b>Source:</b>	⌘	S5 Ericsson (robert.petersen@era.ericsson.se)	
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b> ⌘ 23/05/2003
<b>Category:</b>	⌘	<b>A</b>	<b>Release:</b> ⌘ 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 <a href="#">TR 21.900</a> .	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)

<b>Reason for change:</b>	⌘	The diagram does not follow UML conventions
<b>Summary of change:</b>	⌘	The diagram is made UML compliant. Editorial changes are made.
<b>Consequences if not approved:</b>	⌘	The interpretation of the specification would not be unambiguous.

<b>Clauses affected:</b>	⌘	3.1, 3.2, 4.1, 4.2, 6.2.1, 6.2.2, 6.3.1.2, 6.3.2.2, 6.3.3.2, 6.3.4.1, 6.3.4.2, 6.3.5.2, 6.3.6.2, 6.4.1.1, 6.4.2.1, 6.4.2.2, 6.4.3.1, 6.4.4.1, 6.5.1 and Annex A,								
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N		X		X		X
Y	N									
	X									
	X									
	X									
<b>Other comments:</b>	⌘	Rel-5 Mirror of Rel-4 CR 32.642 attached in S5-036670.								

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

## Change in Clause 3.1

### 3.1 Definitions

...

**Managed Object (MO):** In the context of the present document, a Managed Object (MO) is a software object that encapsulates the manageable characteristics and behaviour of a particular Network Resource. The MO is instance of a MO class defined in a MIM/NRM. This class, called **Information Object Class (IOC)** has attributes that provide information used to characterize the objects that belong to the class (the term "attribute" is taken from TMN and corresponds to a "property" according to CIM). Furthermore, the IOC can have operations that represent the behaviour relevant for that class (the term "operation" is taken from TMN and corresponds to a "method" according to CIM). The IOC may support the emission of notifications that provide information about an event occurrence within a network resource.

**Management Information Model (MIM):** Also referred to as NRM – see the definition below.

**Network Resource Model (NRM):** A model representing the actual managed telecommunications network resources that a System is providing through the subject IRP. An NRM identifies and describes the IOCs, their associations, attributes and operations. The NRM is also referred to as "MIM" (see above), which originates from the ITU-T TMN.

**Node B:** A logical node responsible for radio transmission/reception in one or more cells to/from the User Equipment. It terminates the Iub interface towards the RNC.

## End of Change in Clause 3.1

## Change in Clause 3.2

### 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CIM	Common Information Model
DN	Distinguished Name (see 3GPP TS 32.300 [13])
EM	Element Manager
FM	Fault Management
IOC	Information Object Class
IRP	Integration Reference Point
ITU-T	International Telecommunication Union, Telecommunication Sector
Iub	Interface between RNC and Node B
ME	Managed Element
MIM	Management Information Model
MO	Managed Object
<del>MOC</del>	<del>Managed Object Class</del>
NE	Network Element
NM	Network Manager
NR	Network Resource
NRM	Network Resource Model
PM	Performance Management
RDN	Relative Distinguished Name (see 3GPP TS 32.300 [13])
RNC	Radio Network Controller
TMN	Telecommunications Management Network
UML	Unified Modelling Language
UMTS	Universal Mobile Telecommunications System
UTRAN	UMTS Terrestrial Radio Access Network

## End of Change in Clause 3.2

## Change in Clause 4.1

### 4.1 System context

Figure 4.1 and 4.2 identify system contexts of the IRP defined by the present ~~document~~ [specification](#) in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].

The IRPAgent implements and supports this IRP. The IRPAgent can reside in an Element Manager (EM; for definition see 3GPP TS 32.101 [1]) or a Network Element (NE) (see also [2] clause 8). In the former case, the interface (represented by a thick dotted line) between the EM and the NEs is not the subject of this IRP.

~~The IRPAgent implements and supports the Basic CM IRP. The IRPAgent can be an Element Manager (EM) or a mediator that interfaces one or more NEs (see Figure 4.1), or it can be a Network Element (NE) (see Figure 4.2). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs are not subject of this IRP.~~

An IRPManager using this IRP shall choose one of the two System Contexts defined here, for each NE. For instance, if an EM is responsible for managing a number of NEs, the NM shall access this IRP through the EM and not directly to those NEs. For another IRP though, the System Context may be different.

...

## End of Change in Clause 4.1

## Change in Clause 4.2

### 4.2 Compliance rules

For general definitions of compliance rules related to qualifiers (Mandatory/Optional/Conditional) for *operations*, *notifications* and *parameters* (of operations and notifications) please refer to 3GPP TS 32.102 [2].

The following defines the meaning of Mandatory and Optional IOC attributes and associations between IOCs, in Solution Sets to the IRP ~~defined by the present document~~.

~~Solution Sets to the Basic CM IRP~~ [defined by the present specification](#):

- The IRPManager shall support all mandatory attributes/associations. The IRPManager shall be prepared to receive information related to mandatory as well as optional attributes/associations without failure; however the IRPManager does not have to support handling of the optional attributes/associations.
- The IRPAgent shall support all mandatory attributes/associations. It may support optional attributes/associations.

...

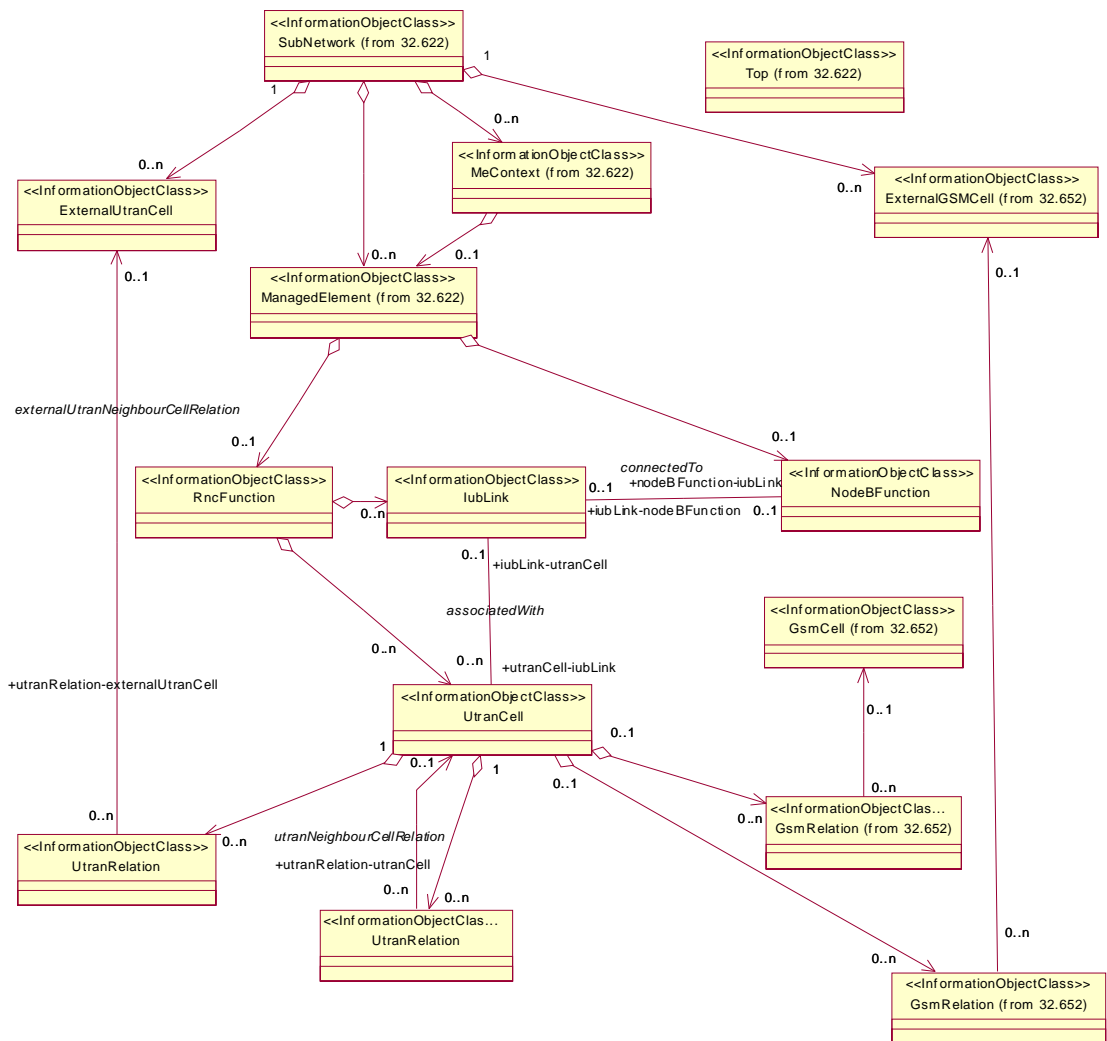
## End of Change in Clause 4.2

## Change in Clause 6.2.1

### 6.2.1 Attributes and relationships

...

NOTE: The name-containment relations between IOCs are indicated by UML ~~“~~unidirectional aggregation by reference~~”~~ (“~~”~~hollow diamonds~~”~~).



- NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.
- NOTE 2: The relation between GsmRelation and GsmCell is optional. It may be present if both the UtranCell and the GsmCell are managed by the same management node.
- NOTE 3: The UtranRelation and GeranRelation-GsmRelation can be name-contained under IOCs defined in other NRMs.

**Figure 6.2.1.1: UTRAN NRM Containment/Naming and Association diagram**

Each IOC is identified with a Distinguished Name (DN) according to 3GPP TS 32.300 [13] that expresses its containment hierarchy. As an example, the DN of an IOC representing a cell could have a format like:

SubNetwork=Sweden, #MMeContext=MEC-Gbg-1, ManagedElement=RNC-Gbg-1, #RncFunction=RF-1, #UtranCell=Gbg-1.

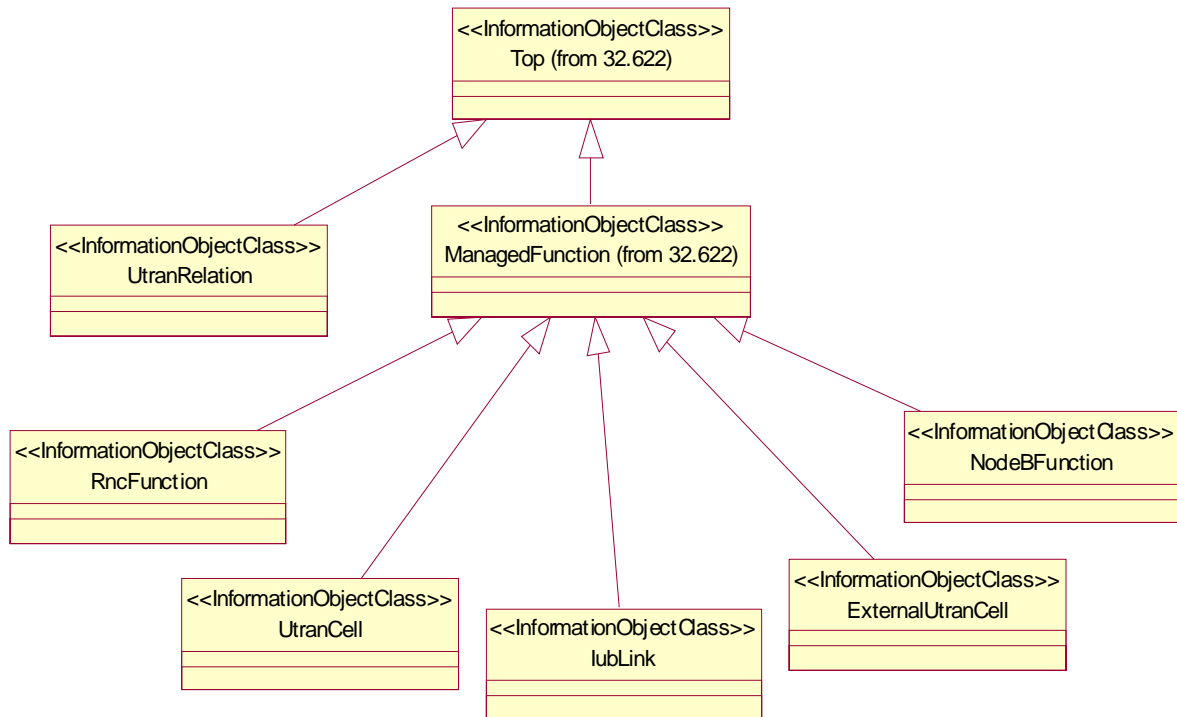
**End of Change in Clause 6.2.1**

## Change in Clause 6.2.2

### 6.2.2 Inheritance

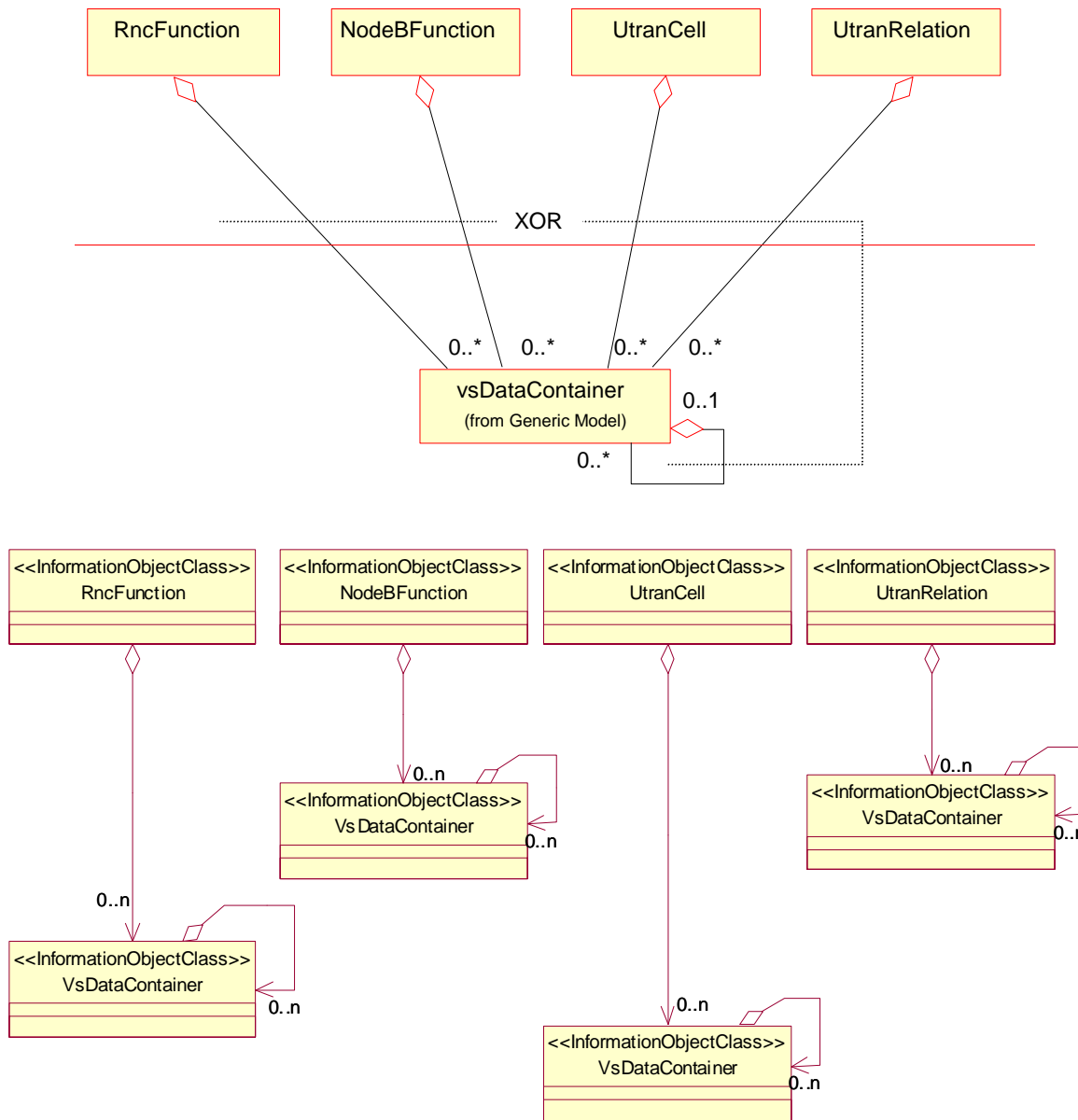
This sub-clause depicts the inheritance relationships that exist between IOCs.

Figure 6.2.2 shows the inheritance hierarchy for the UTRAN NRM.



**Figure 6.2.2: UTRAN NRM Inheritance Hierarchy**





NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.

NOTE 2: Each instance of the vsDataContainer shall only be contained under one MOC/IOC. The vsDataContainer can be contained under MOCs/IOCs defined in other NRMs.

**Figure 6.3: vsDataContainer Containment/Naming and Association in UTRAN NRM diagram**

The vsDataContainer is only used for the Bulk CM IRP.

**End of Change in Clause 6.2.2**

### Change in Clause 6.3.1.2

#### 6.3.1.2 Attributes

**Table 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
rnclId	+	M	M	M

### End of Change in Clause 6.3.1.2

### Change in Clause 6.3.2.2

#### 6.3.2.2 Attributes

**Table 2: Attributes of NodeBFunction**

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

### End of Change in Clause 6.3.2.2

### Change in Clause 6.3.3.2

#### 6.3.3.2 Attributes

**Table 3: 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
uarfcnUI	+	M	M	M
uarfcnDI	+	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-lubLink	+	M	M	-

...

### End of Change in Clause 6.3.3.2

### Change in Clause 6.3.4.1

#### 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].

### End of Change in Clause 6.3.4.1

### Change in Clause 6.3.4.2

#### 6.3.4.2 Attributes

**Table 4: Attributes of lubLink**

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	-

### End of Change in Clause 6.3.4.2

### Change in Clause 6.3.5.2

#### 6.3.5.2 Attributes

**Table 5: Attributes of UtranRelation**

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
utranRelationId	+	M	M	-
relationType	+	M	M	M
adjacentCell	+	M	M	M
uarfcnUI	+	O	M	-
uarfcnDI	+	O	M	-
primaryScramblingCode	+	O	M	-
primaryCpichPower	+	O	M	-
lac	+	O	M	-

### End of Change in Clause 6.3.5.2

**Change in Clause 6.3.6.2**

6.3.6.2      Attributes

**Table 6: Attributes of ExternalUtranCell**

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
externalUtranCellId	+	M	M	-
userLabel	+	M	M	M
cld	+	M	M	M
mcc	+	M	M	M
mnc	+	M	M	M
rncl	+	M	M	M
uarfcnUI	+	M	M	M
uarfcnDI	+	M	M	M
primaryScramblingCode	+	M	M	M
primaryCpichPower	+	M	M	M
lac	+	M	M	M
rac	+	M	M	M

**End of Change in Clause 6.3.6.2**

**Change in Clause 6.4.1.1**

6.4.1.1      Definition

This represents a bi-directional relationship between the IubLink and Node B (through the NodeBFunction). ~~The role of the relation shall be mapped to a reference attribute of the IOC. Each IOC's role mapped to an IOC reference.~~ The names of the reference attribute and the role are the same.

**End of Change in Clause 6.4.1.1**

**Change in Clause 6.4.2.1**

6.4.2.1      Definition

This represents a bi-directional relation between the IubLink and UtranCell. The role of the ~~relation IOC~~ shall be mapped to a reference attribute of the IOC. The name of the reference attribute shall be the role name.

~~This represents a bi-directional relation between the IubLink and UtranCell. The role of the IOC shall be mapped to a reference attribute of the IOC~~

**End of Change in Clause 6.4.2.1**

### Change in Clause 6.4.2.2

#### 6.4.2.2 Roles

**Table 8: Roles of the relation AssociatedWith**

Name	Definition
iubLink-utranCell	This role (when present) represents lubLink capability to identify the set of related UtranCell. lubLink.iubLink-utranCell shall carry the set of UtranCell's DN(s).
utranCell-iubLink	This role (when present) represents UtranCell capability to identify one related lubLink. When the role is absent, the UtranCell.utranCell-iubLink shall contain no information. When it is present, it shall contain one lubLink DN.

### End of Change in Clause 6.4.2.2

### Change in Clause 6.4.3.1

#### 6.4.3.1 Definition

This represents a unidirectional relation from UtranRelation to the ExternalUtranCell. The role of the [relation IOC](#) shall be mapped to a reference attribute, named adjacentCell, of the IOC.

### End of Change in Clause 6.4.3.1

### Change in Clause 6.4.4.1

#### 6.4.4.1 Definition

This represents the unidirectional relation from the UtranRelation to UtranCell. The role of the [relation IOC](#) shall be mapped to a reference attribute, named adjacentCell, of the IOC.

### End of Change in Clause 6.4.4.1

<b>Change in Clause 6.5.1</b>
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## 6.5.1 Definition and legal values

The table below defines the attributes that are present in several Information Object Classes (IOCs) of this TS.

**Table 11: Attributes**

Attribute Name	Definition	Legal Values
adjacentCell	It carries the DN of the UtranCell or the ExternalUtranCell.	
bchPower	The power of the broadcast channel in the cell (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
cld	<del>Cid</del> <del>The attribute</del> is the identifier of a cell in one RNC (Ref. <del>3 GPP</del> 3GPP TS 25.401 [4]), <del>3</del> 3-GPP TS 25.433 [5]).	Type: Integral numeric value Range: (0...65535)
externalUtranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of <del>this the</del> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iubLinkId	An attribute whose "name+value" can be used as an RDN when naming an instance of <del>this the</del> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
lac	<b>IOCs UtranCell and ExternalUtranCell:</b> Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]). <b>IOC UtranRelation:</b> Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Integral numeric value Range: (1.. 65533, 65535)
localCellId	Local Cell id is used to uniquely identify the set of resources defined in a Node B to support a cell (as defined by a Cid Ref. 3 GPP TS 25.401 [4]), 3 GPP TS 25.433 [5]). It must be unique in Node B at a minimum, but may be unique in UTRAN. It can be used to tie the cell in the RNC to a specific set of resources in the Node B.	Type: Integral numeric value Range: (0...268435455)
maximumTransmissionPower	The maximum transmission power of a cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (0,..50 dBm) Steps of 0.1 dB
mcc	Mobile Country Code, MCC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
mnc	Mobile Network Code, MNC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
nodeBFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of <del>this the</del> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
primaryCpichPower	<b>IOCs UtranCell and ExternalUtranCell:</b> The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Numeric value Range: (-10,..,50 dBm) Steps of 0.1 dB
primarySchPower	The power of the primary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
primaryScramblingCode	<b>IOCs UtranCell and ExternalUtranCell:</b> The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system	Type: Integral numeric value Range: (0 – 511)

Attribute Name	Definition	Legal Values
	information in the Cell.	
rac	Routing Area Code, RAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0..255)
relationType	Type of relation: e.g. Intersystem relation, intrafrequency intrasystem relation, interfrequency intrasystem relation.	
rncFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this-the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
rncId	<b>IOC ExternalUtranCell:</b> Unique RNC ID for the <a href="#">drift-associated</a> RNC (Ref. 3 GPP TS 23.003 [3]). <b>IOC RncFunction:</b> Unique RNC ID (Ref. 3 GPP TS 23.003 [3])	
sac	Service Area Code, SAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0.. 65535)
secondarySchPower	The power of the secondary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
uarfcnDl	<b>IOCs UtranCell and ExternalUtranCell:</b> The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	The channel number should correspond to a frequency in the downlink band, range 2110 MHz – 2170 MHz, or 1930 MHz – 1990 MHz for ITU Region 2. (Ref. 3GPP TS 25.101).  Type: Integral numeric value Range: (10562 - 10838) or (9662 - 9938)
uarfcnUl	<b>IOCs UtranCell and ExternalUtranCell:</b> The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]) for another UTRAN cell or the external UTRAN Cell, that is broadcast in the system information in the Cell	The channel number should correspond to a frequency in the uplink band, range 1920 MHz – 1980 MHz, or 1850 MHz - 1910 MHz for ITU Region 2. (Ref. 3GPP TS 25.101)  Type: Integral numeric value Range: (9612 - 9888) or (9262 – 9538)
ura	UTRAN Registration Area, URA (Ref. 3 GPP TS 25.423 [6]).	Type: Integral numeric value Range: (0..65535)
userLabel	A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction.	
utranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this-the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
utranRelationId	An attribute whose "name+value" can be used as an RDN when naming an instance of <a href="#">this-the</a> object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	

### End of Change in Clause 6.5.1

<b>Change in Clause Annex A</b>
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## Annex A (informative): Supported UTRAN network configurations

...

Table A.1 shows the possible number of instances for each network configuration (counted from left to right in figure A.1.):

**Table A.1: Number of instances for each example configuration in figure A.1**

MOCIOC	Config. 1	Config. 2	Config. 3	Config. 4
SubNetwork	1	1	1	0..1
ManagementNode	1	1	0	0
ManagedElement	1..N	1..N	1..N	1
MeContext	0..M	0..M	0..M	0..1
RncFunction	0..P	0..P	0..1	0..1
NodeBFunction	0..Q	0..Q	0..(N-1)	0..1
IubLink	0..Q	0..Q	0..(N-1)	0
UtranCell	0..R	0..R	0..R	0..R
IRPAgent	1	1	1	1
NotificationIRP	1	1	1	1
AlarmIRP	0..1	0..1	0..1	0..1
BasicCmIRP	0..1	0..1	0..1	0..1

<b>End of Change in Annex A End of Document</b>
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## CHANGE REQUEST

⌘ **32.642 CR 009** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

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

<b>Title:</b>	⌘	Correction of UML diagram vsDataContainer Containment/Naming and Association in UTRAN NRM	
<b>Source:</b>	⌘	S5 Ericsson (robert.petersen@era.ericsson.se)	
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b> ⌘ 23/05/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b> ⌘ Rel-4
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	The diagram does not follow UML conventions
<b>Summary of change:</b>	⌘	The diagram is made UML compliant. Editorial changes are made.
<b>Consequences if not approved:</b>	⌘	The interpretation of the specification would not be unambiguous.

<b>Clauses affected:</b>	⌘	4.1, 4.2, 6.2.2, 6.3.6 and 6.4.1.								
<b>Other specs affected:</b>	⌘	<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;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"> </td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ Rel-5 32.642	Y	N		X		X	X	
Y	N									
	X									
	X									
X										
<b>Other comments:</b>	⌘	Rel-5 Mirror CR 32.642 attached in S5-036671.								

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

**Change in Clause 4.1****4.1 System context**

Figure 4.1 and 4.2 identify system contexts of the IRP defined by the present ~~document~~ [specification](#) in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].

The IRPAgent implements and supports this IRP. The IRPAgent can reside in an Element Manager (EM; for definition see 3GPP TS 32.101 [1]) or a Network Element (NE) (see also [2] clause 8). In the former case, the interface (represented by a thick dotted line) between the EM and the NEs is not the subject of this IRP.

~~The IRPAgent implements and supports the Basic CM IRP. The IRPAgent can be an Element Manager (EM) or a mediator that interfaces one or more NEs (see Figure 4.1), or it can be a Network Element (NE) (see Figure 4.2). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs are not subject of this IRP.~~

An IRPManager using this IRP shall choose one of the two System Contexts defined here, for each NE. For instance, if an EM is responsible for managing a number of NEs, the NM shall access this IRP through the EM and not directly to those NEs. For another IRP though, the System Context may be different.

...

**End of Change in Clause 4.1**

## Change in Clause 4.2

### 4.2 Compliance rules

For general definitions of compliance rules related to qualifiers (Mandatory/Optional/Conditional) for *operations, notifications and parameters* (of operations and notifications) please refer to 3GPP TS 32.102 [2].

The following defines the meaning of Mandatory and Optional MOC attributes and associations between MOCs, in Solution Sets to the IRP ~~defined by the present document~~.

~~Solution Sets to the Basic CM IRP~~ [defined by the present specification](#):

- The IRPManager shall support all mandatory attributes/associations. The IRPManager shall be prepared to receive information related to mandatory as well as optional attributes/associations without failure; however the IRPManager does not have to support handling of the optional attributes/associations.
- The IRPAgent shall support all mandatory attributes/associations. It may support optional attributes/associations.

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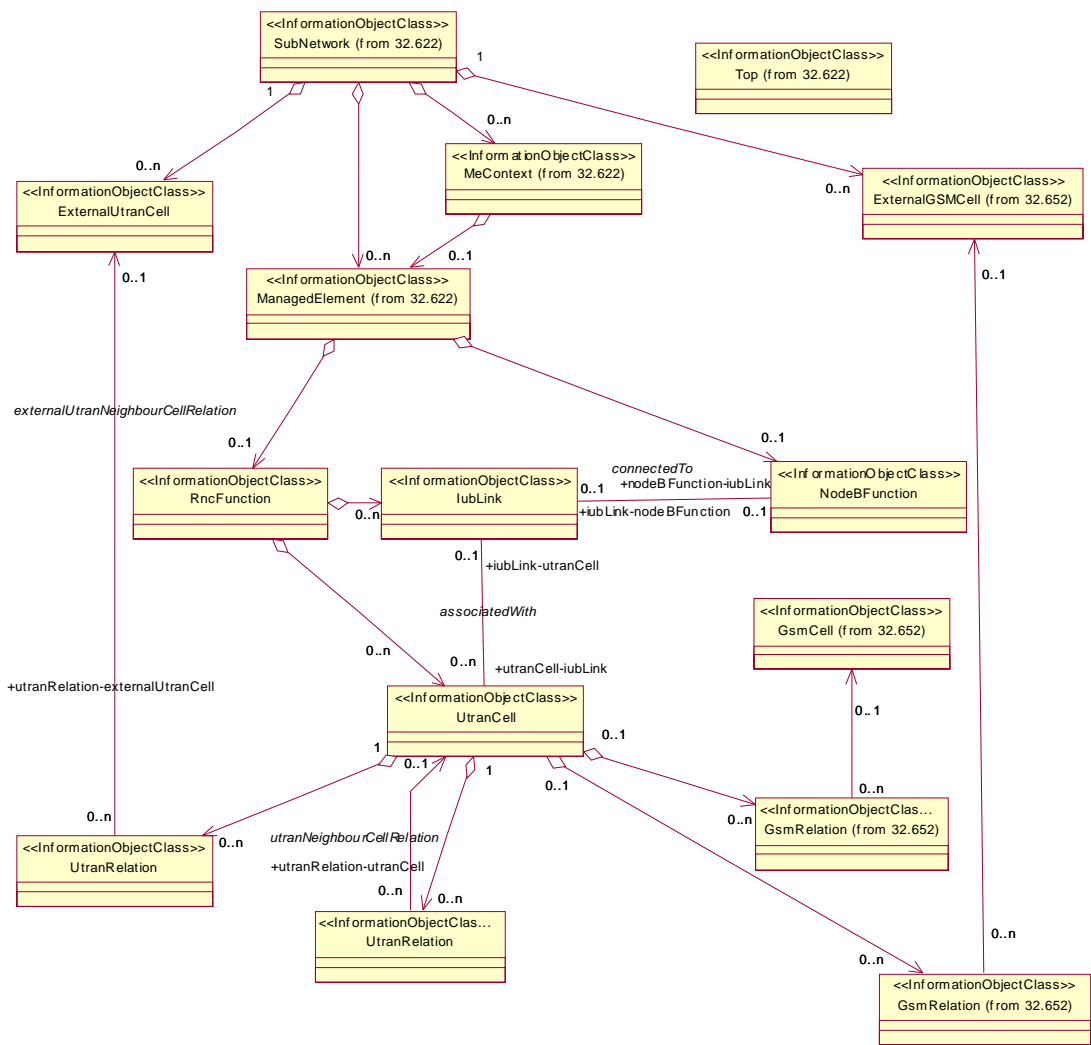
End of Change in Clause 4.2

## Change in Clause 6.2.2

### 6.2.2 Containment/Naming and Association diagrams

Figure 6.2 and 6.3 show the containment/naming hierarchy and the associations of the UTRAN NRM.

NOTE: The Managed Object containment/naming relationships are in the diagram(s) below indicated by UML "Aggregation by reference" ("hollow diamonds").



NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.

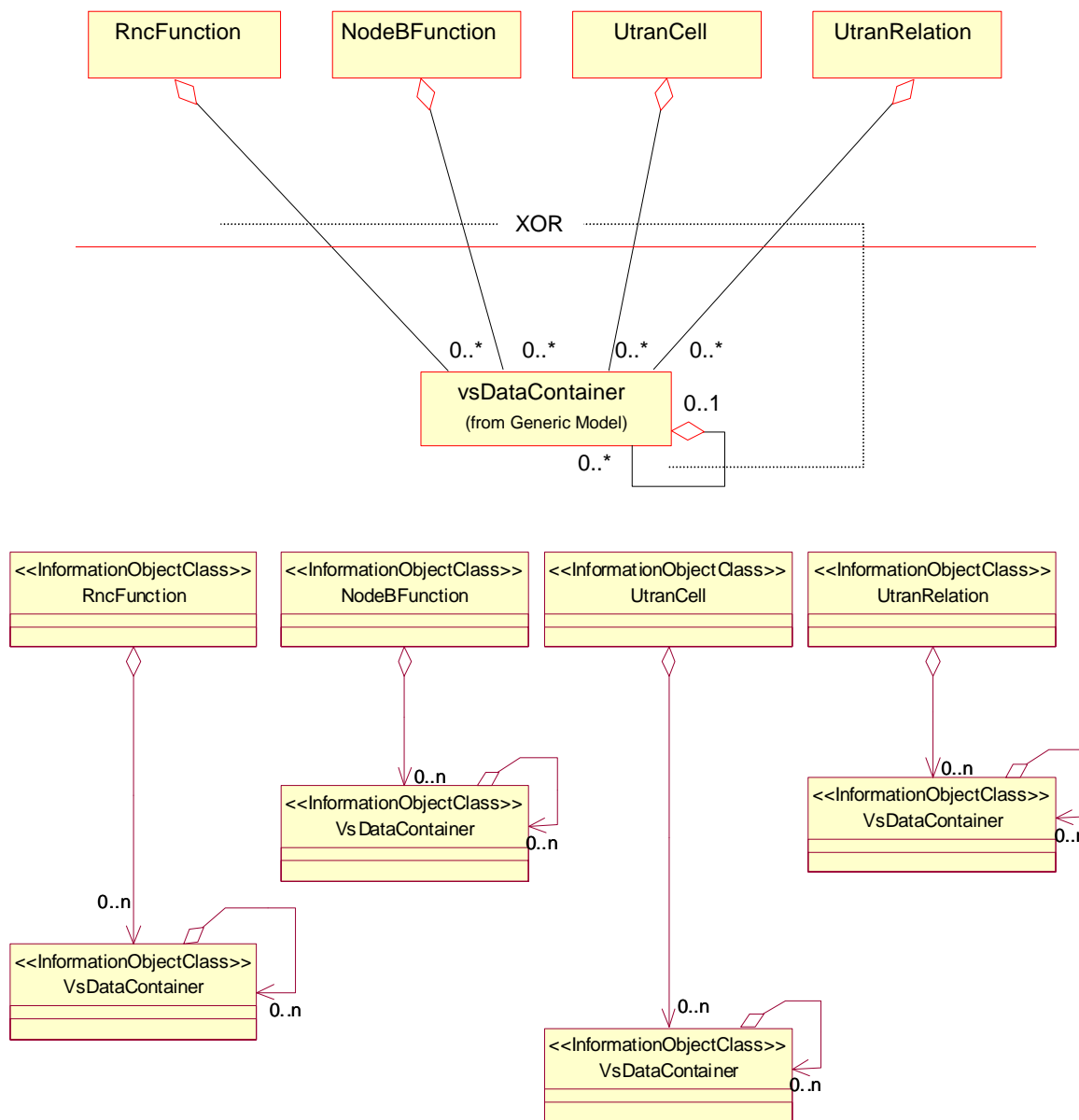
NOTE 2: The association between GsmRelation and GsmCell is optional. It may be valid if both the UtranCell and the GsmCell are managed by the same management node.

NOTE 3: The UtranRelation and ~~GeranRelation~~ GsmRelation can be contained under MOCs defined in other NRMs.

**Figure 6.2: UTRAN NRM Containment/Naming and Association diagram**

Each Managed Object is identified with a Distinguished Name (DN) according to 3GPP TS 32.300 [13] that expresses its containment hierarchy. As an example, the DN of a Managed Object representing a cell could have a format like:

SubNetwork=Sweden, ~~m~~MeContext=MEC-Gbg-1, ManagedElement=RNC-Gbg-1, ~~r~~RncFunction=RF-1, ~~u~~UtranCell=Gbg-1.



NOTE 1: The listed cardinality numbers represent transient as well as steady-state numbers, and reflect all managed object creation and deletion scenarios.

NOTE 2: Each instance of the `vsDataContainer` shall only be contained under one MOC. The `vsDataContainer` can be contained under MOCs defined in other NRMs.

**Figure 6.3: vsDataContainer Containment/Naming and Association in UTRAN NRM diagram**

The `vsDataContainer` is only used for the Bulk CM IRP.

**End of Change in Clause 6.2.2**

**Change in Clause 6.3.6****6.3.6 MOC ExternalUtranCell**

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

....

**End of Change in Clause 6.3.6****Change in Clause 6.4.1****6.4.1 Association ConnectedTo (M)**

This bi-directional association models the relationship between the IubLink and NodeB (through the NodeBFunction). It has two roles, named IubLink-NodeBFunction and NodeBFunction-IubLink. These two roles model each MOC's association with the other MOC. Each role is in the MOC definition mapped to a reference attribute with the same name.

**End of Change in Clause 6.4.1  
End of Document**

## CHANGE REQUEST

⌘ **32.642 CR 008** ⌘ rev **-** ⌘ Current version: **5.1.1** ⌘

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

<b>Title:</b>	⌘	Include notification tables	
<b>Source:</b>	⌘	S5	
<b>Work item code:</b>	⌘	OAM-CM	<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>A</b>	<b>Release:</b> ⌘ REL-5
		Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
		<b>F</b> (correction)	2 (GSM Phase 2)
		<b>A</b> (corresponds to a correction in an earlier release)	R96 (Release 1996)
		<b>B</b> (addition of feature),	R97 (Release 1997)
		<b>C</b> (functional modification of feature)	R98 (Release 1998)
		<b>D</b> (editorial modification)	R99 (Release 1999)
		Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘	To include the tables for notifications for the IOCs	
<b>Summary of change:</b>	⌘	The notification tables from Rel-4 are included for the IOCs, including the notifications notifyComments and notifyAlarmListRebuilt.	
<b>Consequences if not approved:</b>	⌘	The specification would not show which notifications an IOC supports.	

<b>Clauses affected:</b>	⌘	1, 6.3.1.2, 6.3.2.2, 6.3.3.2, 6.3.4.2, 6.3.5.2, 6.3.6.2, 6.4.1.2, 6.4.2.2, 6.4.3.2, 6.4.4.2 and 6.5.1.									
<b>Other specs affected:</b>	⌘	<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;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> </table> Other core specifications      ⌘ Test specifications O&M Specifications	Y	N		<b>X</b>		<b>X</b>		<b>X</b>	
Y	N										
	<b>X</b>										
	<b>X</b>										
	<b>X</b>										
<b>Other comments:</b>	⌘	Rel-5 Mirror of Rel-4 CR 32.642 attached in S5-036328.									

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

## Change in Clause 1

### 1 Scope

The present document is part of an Integration Reference Point (IRP) named "UTRAN Network Resources IRP", through which an "IRPAgent" (typically an Element Manager or Network Element) can communicate Configuration Management information to one or several "IRPManagers" (typically Network Managers) concerning UTRAN resources. The "UTRAN Network Resources IRP" comprises a set of specifications defining Requirements, a protocol neutral Network Resource Model (NRM) and corresponding Solution Set(s).

The present document

1. specifies the protocol neutral UTRAN Network Resources IRP: Network Resource Model. It reuses relevant parts of the generic NRM in TS 32.622 [16], either by direct reuse or sub-classing, and in addition to that defines UTRAN specific Managed Object Classes.

The Configuration Management (CM) area is very large. The intention is to split the specification of the related interfaces in several IRPs – as described in the Introduction clause above. An important aspect of such a split is that the Network Resource Models (NRMs) defined in different IRPs containing NRMs are consistent, and that NRMs supported by an IRPAgent implementation can be accessed as one coherent model through one IRP Information Service.

To summarize, the present document has the following main purpose:

- (1) to define the applied UTRAN specific Network Resource Model, based on the generic NRM in TS 32.622 [16].

In order to access the information defined by this NRM, an IRP Information Service (IS) is needed, such as the Basic CM IRP: IS (TS 32.602 [17]) or the Bulk CM IRP: IS (TS 32.612 [18]). However, which Information Service that is applicable is outside the scope of this document.

**Finally, ¶**Regarding the support of the State Management IRP: IS (TS 32.672 [8]), all NRM's of one release shall support the same State Management IRP version. This NRM specification is related to 3GPP TS 32.672 V5.0.X.

## End of Change in Clause 1



<b>Change in Clause 6.3.1.2</b>
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## 6.3.1.2 Attributes

Table 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
rnclId	+	M	M	M

Table 2: Notifications of RncFunction

<u>Name</u>	<u>Qualifier</u>	<u>Notes</u>
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.1.2</b>
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<b>Change in Clause 6.3.2.2</b>
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## 6.3.2.2 Attributes

**Table 23: Attributes of NodeBFunction**

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

**Table 4 Notifications of NodeBFunction**

<u>Name</u>	<u>Qualifier</u>	<u>Notes</u>
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.2.2</b>
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<b>Change in Clause 6.3.3.2</b>
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## 6.3.3.2 Attributes

Table 35: Attributes of UtranCell

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
utranCellId	+	M	M	-
userLabel	+	M	M	M
cld	+	M	M	M
localCellId	+	M	M	M
uarfcnUI	+	M	M	M
uarfcnDI	+	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-lubLink	+	M	M	-

Table 3a6: 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 7: Notifications of UtranCell

Name	Qualifier	Notes
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.3.2</b>
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<b>Change in Clause 6.3.4.2</b>
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## 6.3.4.2 Attributes

**Table 48: 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 9: Notifications of IubLink**

Name	Qualifier	Notes
<a href="#">notifyAckStateChanged</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyChangedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyClearedAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyNewAlarm</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	
<a href="#">notifyComments</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	
<a href="#">notifyAlarmListRebuilt</a>	<a href="#">See Alarm IRP (3GPP TS 32.111-2 [11])</a>	

<b>End of Change in Clause 6.3.4.2</b>
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<b>Change in Clause 6.3.5.2</b>
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## 6.3.5.2 Attributes

Table 510: Attributes of UtranRelation

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
utranRelationId	+	M	M	-
relationType	+	M	M	M
adjacentCell	+	M	M	M
uarfcnUI	+	O	M	-
uarfcnDI	+	O	M	-
primaryScramblingCode	+	O	M	-
primaryCpichPower	+	O	M	-
lac	+	O	M	-

Table 11: Notifications of UtranRelation

<u>Name</u>	<u>Qualifier</u>	<u>Notes</u>
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	

<b>End of Change in Clause 6.3.5.2</b>
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**Change in Clause 6.3.6.2**

6.3.6.2 Attributes

**Table 612: 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
rnId	+	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 13: Notifications of ExternalUtranCell**

<u>Name</u>	<u>Qualifier</u>	<u>Notes</u>
<a href="#">notifyAttributeValueChange</a>	<a href="#">O</a>	
<a href="#">notifyObjectCreation</a>	<a href="#">O</a>	
<a href="#">notifyObjectDeletion</a>	<a href="#">O</a>	

**End of Change in Clause 6.3.6.2**

**Change in Clause 6.4.1.2**

## 6.4.1.2 Roles

**Table 714: Roles of the relation ConnectedTo**

Name	Definition
iubLink-nodeBFunction	This role (when present) represents lubLink capability to identify one NodeBFunction. When the role is absent, the lubLink.iubLink-nodeBFunction shall contain no information. When present, it shall contain one NodeBFunction DN.
nodeBFunction-iubLink	This role (when present) represents NodeBFunction capability to identify one lubLink. When the role is absent, the NodeBFunction.nodeBFunction-iubLink shall contain no information. When present, it shall contain one lubLink DN.

**End of Change in Clause 6.4.1.2**

**Change in Clause 6.4.2.2**

## 6.4.2.2 Roles

**Table 815: Roles of the relation AssociatedWith**

Name	Definition
iubLink-utranCell	This role (when present) represents lubLink capability to identify the set of related UtranCell. lubLink.iubLink-utranCell shall carry the set of UtranCell's DN(s).
utranCell-iubLink	This role (when present) represents UtranCell capability to identify one related lubLink. When the role is absent, the UtranCell.utranCell-iubLink shall contain no information. When it is present, it shall contain one lubLink DN.

**End of Change in Clause 6.4.2.2**



**Change in Clause 6.4.3.2**

## 6.4.3.2 Roles

**Table 916: Roles of the relation ExternalUtranNeighbourCellRelation**

Name	Definition
utranRelation-externalUtranNeighbourCell	This role (when present) represents UtranRelation capability to identify one ExternalUtranCell. When this role is present, the UtranRelation.adjacentCell shall contain one ExternalUtranNeighbourCell DN.

**End of Change in Clause 6.4.3.2**

**Change in Clause 6.4.4.2**

## 6.4.4.2 Roles

**Table 1017: Roles of the relation UtranNeighbourCellRelation**

Name	Definition
utranRelation-utranNeighbourCell	This role (when present) represents UtranRelation capability to identify one UtranCell. When this role is present, the UtranRelation.adjacentCell shall contain one UtranCell DN.

**End of Change in Clause 6.4.4.2**

**Change in Clause 6.5.1**

## 6.5.1 Definition and legal values

The table below defines the attributes that are present in several Information Object Classes (IOCs) of this TS.

**Table 4118: Attributes**

Attribute Name	Definition	Legal Values
adjacentCell	It carries the DN of the UtranCell or the ExternalUtranCell.	
bchPower	The power of the broadcast channel in the cell (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
cld	Cid is the identifier of a cell in one RNC (Ref. 3 GPP TS 25.401 [4]), ], 3 GPP TS 25.433 [5]).	Type: Integral numeric value Range: (0...65535)
externalUtranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iubLinkId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
lac	<b>IOCs UtranCell and ExternalUtranCell:</b> Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]). <b>IOC UtranRelation:</b> Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Integral numeric value Range: (1.. 65533, 65535)
localCellId	Local Cell id is used to uniquely identify the set of resources defined in a Node B to support a cell (as defined by a Cid Ref. 3 GPP TS 25.401 [4]), 3 GPP TS 25.433 [5]). It must be unique in Node B at a minimum, but may be unique in UTRAN. It can be used to tie the cell in the RNC to a specific set of resources in the Node B.	Type: Integral numeric value Range: (0...268435455)
maximumTransmissionPower	The maximum transmission power of a cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (0,..50 dBm) Steps of 0.1 dB
mcc	Mobile Country Code, MCC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
mnc	Mobile Network Code, MNC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
nodeBFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
primaryCpichPower	<b>IOCs UtranCell and ExternalUtranCell:</b> The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Numeric value Range: (-10,..,50 dBm) Steps of 0.1 dB
primarySchPower	The power of the primary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
primaryScramblingCode	<b>IOCs UtranCell and ExternalUtranCell:</b> The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Integral numeric value Range: (0 – 511)
rac	Routing Area Code, RAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0..255)

Attribute Name	Definition	Legal Values
relationType	Type of relation: e.g. Intersystem relation, intrafrequency intrasystem relation, interfrequency intrasystem relation.	
rncFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
rncId	<b>IOC ExternalUtranCell:</b> Unique RNC ID for the drift RNC (Ref. 3 GPP TS 23.003 [3]). <b>IOC RncFunction:</b> Unique RNC ID (Ref. 3 GPP TS 23.003 [3])	
sac	Service Area Code, SAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0.. 65535)
secondarySchPower	The power of the secondary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
uarfcnDI	<b>IOCs UtranCell and ExternalUtranCell:</b> The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	The channel number should correspond to a frequency in the downlink band, range 2110 MHz – 2170 MHz, or 1930 MHz – 1990 MHz for ITU Region 2. (Ref. 3GPP TS 25.101).  Type: Integral numeric value Range: (10562 - 10838) or (9662 - 9938)
uarfcnUI	<b>IOCs UtranCell and ExternalUtranCell:</b> The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). <b>IOC UtranRelation:</b> The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]) for another UTRAN cell or the external UTRAN Cell, that is broadcast in the system information in the Cell	The channel number should correspond to a frequency in the uplink band, range 1920 MHz – 1980 MHz, or 1850 MHz - 1910 MHz for ITU Region 2. (Ref. 3GPP TS 25.101)  Type: Integral numeric value Range: (9612 - 9888) or (9262 – 9538)
ura	UTRAN Registration Area, URA (Ref. 3 GPP TS 25.423 [6]).	Type: Integral numeric value Range: (0..65535)
userLabel	A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction.	
utranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
utranRelationId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	

**End of Change in 6.5.1**  
**End of Document**