

Source: SA5 (Telecom Management)
Title: 5 Rel-6 CR 32.632/3/5 Core network resources IRP NRM / CORBA / XML
Document for: Approval
Agenda Item: 7.5.3

Doc1stLevel	Specific a	CR	R	Phase	Subject	Ca	VersCu	Doc2ndLev	Workitemsl D
SP-040809	32.632	012	--	Rel-6	Add new IMS Entities to Rel-6 Core Network NRM	B	6.0.0	S5-049006	OAM-NIM
SP-040809	32.632	013	--	Rel-6	Add restart notification to GSN objects using "proceduralStatus" attribute and notifyStateChange notification	B	6.0.0	S5-047110	OAM-NIM
SP-040809	32.633	007	--	Rel-6	Add new IMS Entities	B	6.0.0	S5-049007	OAM-NIM
SP-040809	32.633	008	--	Rel-6	Add restart notification to GSN objects using "proceduralStatus" attribute - Align with IS in 32.632	B	6.0.0	S5-047111	OAM-NIM
SP-040809	32.635	008	--	Rel-6	Add new IMS Entities	B	6.0.0	S5-049008	OAM-NIM

CHANGE REQUEST

⌘ **32.632 CR 012** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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

Title:	⌘ Add new IMS Entities to Rel-6 Core Network NRM		
Source:	⌘ SA5 (mohanr@lucent.com)		
Work item code:	⌘ OAM-NIM	Date:	⌘ 19/11/2004
Category:	⌘ B	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ Introduce 3GPP standards for modelling of network elements in the IP Multimedia Subsystem.		
Summary of change:	⌘ Added definitions for ScscfFunction, PcscfFunction, IcscfFunction, MrfcFunction, MrfpFunction, AsFunction, SlfFunction, BgcfFunction, and Mgcfunction. Font and minor changes to align with TS 32.151 IS template		
Consequences if not approved:	⌘		

Clauses affected:	⌘ 6.2.1, 6.2.2, 6.5.1, New clauses in 6.3, table 6.5.1 has attribute additions plus an alphabetical sort.										
Other specs affected:	<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>	Y	N		X		X	X		Other core specifications Test specifications O&M Specifications	⌘ Rel-6 32.633, 32.634, 32.635
Y	N										
	X										
	X										
X											
Other comments:	⌘ Parent to Children CRs 32.633, 32.635 in S5-049007/8. Corresponding 32.634 CR will be submitted to a future SA meeting.										

Change in Clause 1

1 Scope

The present document is part of an Integration Reference Point (IRP) named "Core 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 CN resources. This version of the IRP is mainly intended for "passive management" of high-level network configuration and status information as required by a Network Manager. The "Core 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 Core Network Resources IRP: Network Resource Model. It reuses relevant parts of the generic NRM in 3GPP TS 32.622 [16], either by direct reuse or sub-classing, and in addition to that defines CN specific Managed Object Classes. [Release 6 introduces support for management of IMS entities addressed in 3GPP TS 23.228 \[20\]](#).

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 (IS).

To summarize, the present document has the following main purpose: to define the applied CN specific Network Resource Model, based on the generic NRM in 3GPP TS 32.622 [16].

Finally, in order to access the information defined by this NRM, an IRP Information Service (IS) is needed, such as the Basic CM IRP: IS 3GPP TS 32.602 [17]. However, which Information Service that is applicable is outside the scope of the present document.

End of Change in Clause 1

Change in Clause 2

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".

[2] 3GPP TS 32.102: "Telecommunication management; Architecture".

[3] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point; Information Service (IS)".

[4] - [6] Void.

- [7] ITU-T Recommendation X.710 (1991): "Common management information service definition for CCITT applications".
- [8] - [10] Void.
- [11] 3GPP TS 32.111-2: "Telecommunication management; Fault Management; Part 2: Alarm Integration Reference Point: Information Service (IS)".
- [12] Void.
- [13] 3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".
- [14] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".
- [15] 3GPP TS 23.002: "Network architecture".
- [16] 3GPP TS 32.622: "Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Network Resource Model (NRM)".
- [17] 3GPP TS 32.602: "Telecommunication management; Configuration Management (CM); Basic Configuration Management Integration Reference Point (IRP): Information Service (IS)".
- [18] 3GPP TS 23.060: "General Packet Radio Service (GPRS) service description; Stage 2".
- [19] 3GPP TS 23.003: "Numbering, addressing and identification".
- [20] [3GPP TS 23.228: "IP Multimedia Subsystem \(IMS\) Stage 2"](#).

End of Change in Clause 2

Change in Clause 3.2

3.2 Abbreviations

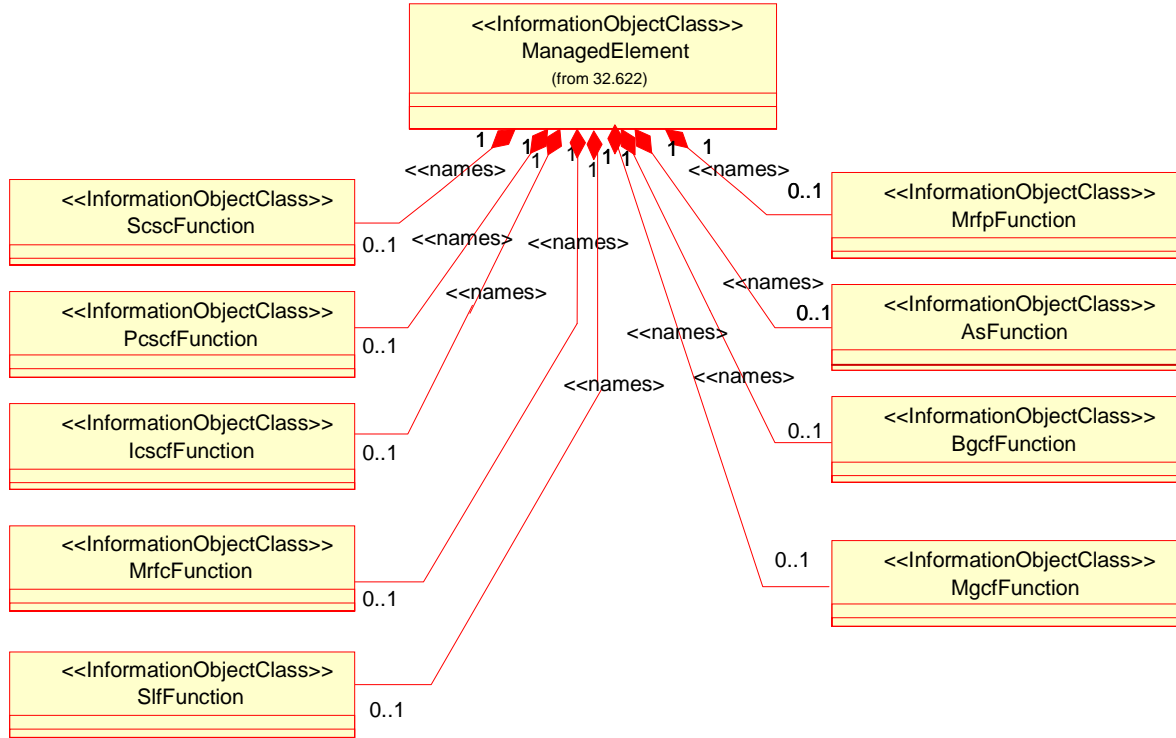
For the purposes of the present document, the following abbreviations apply:

AUC	AUthentication Centre
AS	App lication Server
BG	Border Gateway
BGCF	Breakout Gateway Control Function
BS	Billing System
CBC	Cell Broadcast Center
CGF	Charging Gateway Functionality
CN	Core Network
DN	Distinguished Name (see 3GPP TS 32.300 [13])
EIR	Equipment Identity Register
EM	Element Manager
FM	Fault Management
FNR	Flexible Number Register
GDMO	Guidelines for the Definition of Managed Objects
GGSN	Gateway GPRS Support Node
GMLC	Gateway Mobile Location Center
GMSC Server	Gateway MSC Server
GMSC	Gateway MSC
GPRS	General Packet Radio System

HLR	Home Location Register
ICSCF	Interrogating Call Session Control Function
IDL	Interface Definition Language
IMS	IP Multimedia Subsystem
IMSMGW	IMS Media Gateway
IOC	Information Object Class
IRP	Integration Reference Point
ISO	International Standards Organization
IWF	InterWorking Function
ME	Managed Element
MGCF	Media Gateway Control Function
MGW	Media GateWay
MIM	Management Information Model
MNP-SRF	Mobile Number Portability-Signalling Relay Function
MO	Managed Object
MOI	Managed Object Instance
MRFC	Multimedia Resource Function Controller
MRFP	Call Session Control Function Processor
MSC Server	Mobile Services Switching Centre Server
MSC	Mobile Services Switching Centre
NE	Network Element
NM	Network Manager
NPDB	Number Portability DataBase
NR	Network Resource
NRM	Network Resource Model
OSI	Open Systems Interconnection
PCSCF	Proxy Call Session Control Function
PM	Performance Management
RDN	Relative Distinguished Name (see 3GPP TS 32.300 [13])
SCF	Service Control Function
SCSCF	Serving Call Session Control Function
SGSN	Serving GPRS Support Node
SGW	Signalling GateWay
SLF	Subscription Locator Function
SMLC	Serving Mobile Location Center
SMS	Short Message Service
SMS-GMSC	SMS Gateway MSC
SMS-IW MSC	SMS InterWorking MSC
SRF	Specialized Resource Function
SSF	Service Switching Function
TMN	Telecommunications Management Network
UML	Unified Modelling Language
UMTS	Universal Mobile Telecommunications System
UTRAN	Universal Terrestrial Radio Access Network
VLR	Visitor Location Register

End of Change in Clause 3.2

New Figure 6.2.1.3



[Figure 6.2.1.3: CN NRM Containment/Naming and Association](#)

Change caption fig 6.2.1.3 (becomes 6.2.1.4 plus new note)

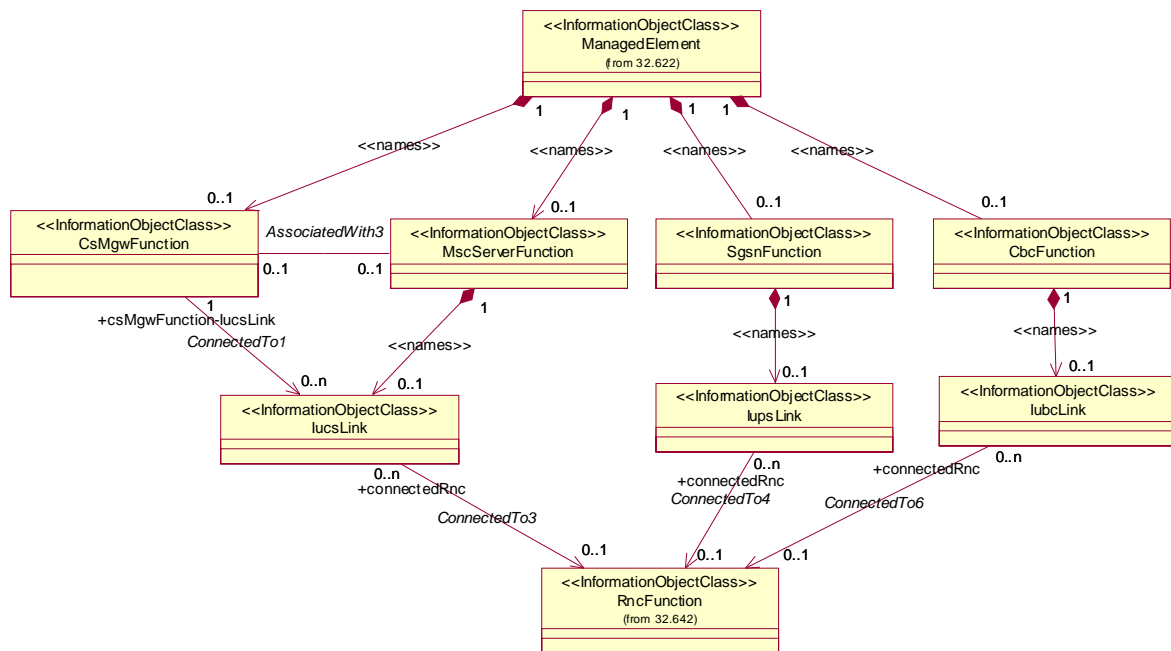


Figure 6.2.1.34: CN UTRAN NRM Containment/Naming and Association

- NOTE 1: The association between MscServer and GsmCell, and SgsnFunction and GsmCell is optional. It may be valid if both the MscServer and GsmCell, or SgsnFunction and GsmCell are managed by the same management node.
- NOTE 2: The association between MscServer and CsMgwFunction is optional and is only mandatory when they belong to different ManagedElements.
- NOTE 3: [IMS Entities \(containing combinations of functions\) like MGW, CSCF and MRF are not modelled. Instead, functionally specific entities like CS-MGW, IMS-MGW, P-CSCF, S-CSCF, I-CSCF, MRFC and MRFP have been modelled.](#)

End change caption Fig 6.2.1.3 (becomes 6.2.1.4 plus new note)

Change caption Fig 6.2.1.4, becomes 6.2.1.5

Figure 6.2.1.54: CN GERAN NRM Containment/Naming and Association

End Change of caption Fig 6.2.1.4, becoming 6.2.1.5

Change in Clause 6.2.2 & new figure

6.2.2 Inheritance

This clause depicts the inheritance relationships that exist between IOCs.

Figures [6.2.2.1](#) and [6.2.2.2](#) below show the inheritance hierarchy for the CN NRM.

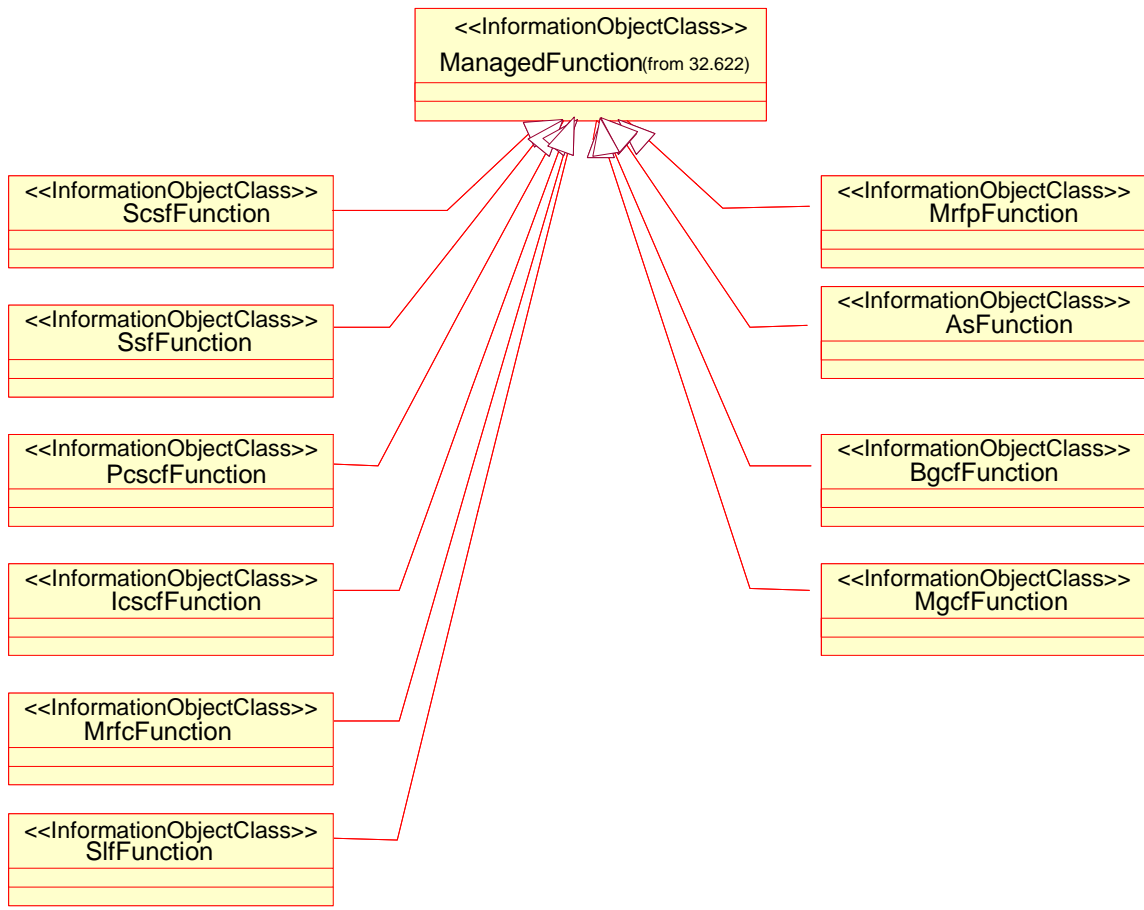


Figure 6.2.2.3: CN NRM Inheritance Hierarchy 3

End of Change in Clause 6.2.2 & new figure

New Clauses in Sec 6.3

6.3.32 ScscfFunction

6.3.32.1 Definitions

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

6.3.32.2 Attributes

Table 6.3.32.1: Attributes of ScscfFunction

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
<u>scscfFunctionId</u>	<u>+</u>	<u>M</u>	<u>M</u>	<u>-</u>
<u>userLabel</u>	<u>+</u>	<u>M</u>	<u>M</u>	<u>M</u>

6.3.32.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC ScscfFunction.

Table 6.3.32.2: Notifications of ScscfFunction

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

6.3.33 PscsfFunction

6.3.33.1 Definitions

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

6.3.33.2 Attributes

Table 6.3.33.1: Attributes of PscsfFunction

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
<u>pscscfFunctionId</u>	<u>+</u>	<u>M</u>	<u>M</u>	<u>-</u>
<u>userLabel</u>	<u>+</u>	<u>M</u>	<u>M</u>	<u>M</u>

6.3.33.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC PcscfFunction.

Table 6.3.33.2: Notifications of PcscfFunction

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

6.3.34 IcscfFunction

6.3.34.1 Definitions

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

6.3.34.2 Attributes

Table 6.3.34.1: Attributes of IcscfFunction

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
icscfFunctionId	+	M	M	-
userLabel	+	M	M	M

6.3.34.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC IcscfFunction.

Table 6.3.34.2: Notifications of IcscfFunction

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

6.3.35 slfFunction

6.3.35.1 Definitions

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

6.3.35.2 Attributes

Table 6.3.35.1: Attributes of `slfFunction`

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
<code>slfFunctionId</code>	+	M	M	-
<code>userLabel</code>	+	M	M	M

6.3.35.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC `SlfFunction`.

Table 6.3.35.2: Notifications of `slfFunction`

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

6.3.36 BgcfFunction

6.3.36.1 Definitions

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

6.3.36.2 Attributes

Table 6.3.36.1: Attributes of `BgcfFunction`

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
<code>bgcfFunctionId</code>	+	M	M	-
<code>userLabel</code>	+	M	M	M

6.3.36.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC `BgcfFunction`.

Table 6.3.36.2: Notifications of BgcfFunction

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])	

6.3.37 MrfcFunction

6.3.37.1 Definitions

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

6.3.37.2 Attributes

Table 6.3.37.1: Attributes of MrfcFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
mrfcFunctionId	<u>+</u>	<u>M</u>	<u>M</u>	<u>-</u>
userLabel	<u>+</u>	<u>M</u>	<u>M</u>	<u>M</u>

6.3.37.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC [MrfcFunction](#).

Table 6.3.37.2: Notifications of MrfcFunction

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])	

6.3.38 MrfpFunction

6.3.38.1 Definitions

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

6.3.38.2 Attributes

Table 6.3.38.1: Attributes of MrfpFunction

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

6.3.38.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC [MrfpFunction](#).

Table 6.3.38.2: Notifications of MrfpFunction

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])	

6.3.39 AsFunction

6.3.39.1 Definitions

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

6.3.39.2 Attributes

Table 6.3.39.1: Attributes of AsFunction

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

6.3.39.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC [AsFunction](#).

Table 6.3.39.2: Notifications of AsFunction

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

6.3.41 MgcFunction

6.3.41.1 Definitions

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

6.3.41.2 Attributes

Table 6.3.41.1: Attributes of MgcFunction

<u>Attribute name</u>	<u>Visibility</u>	<u>Support Qualifier</u>	<u>Read Qualifier</u>	<u>Write Qualifier</u>
mgcfFunctionId	+	M	M	-
userLabel	+	M	M	M

6.3.41.3 Notifications

This subclause presents the list of notifications that can be emitted across the Itf-N, with "object class" and "object instance" parameters of the notification header of these notifications identifying an instance of the IOC [MgcFunction](#).

Table 6.3.41.2: Notifications of MgcFunction

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

End of New Clauses in Sec 6.3

Change in Clause 6.5.1

6.5.1 Definition and legal values

Table 6.5.1 defines the attributes that are present in several information object classes of the present document.

<u>iubLinkId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>iucslinkId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>iupslinkId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>lacList</u>	<u>List of Location Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).</u>	
<u>mccList</u>	<u>List of Mobile Country Codes, MCC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).</u>	
<u>mgcfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mqwFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>mncList</u>	<u>List of Mobile Network Codes, MNC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).</u>	
<u>mnpSrfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>mrfcFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mrfpFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mscId</u>	<u>Unique MSC ID (Ref. 3GPP TS 23.002 [15]).</u>	
<u>mscServerFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>npdbFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>pcscfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>sacList</u>	<u>List of Service Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).</u>	
<u>scfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>scscfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>sgsnFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>sgsnId</u>	<u>Unique SGSN ID (Ref. 3GPP TS 23.002 [15]).</u>	
<u>sqwFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>slfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>smlcFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>smsGmscFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	
<u>smsIwmscFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.</u>	

srfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
ssfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
userLabel	A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction.	
vlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
Attribute-Name	Definition	Legal Values
lacList	List of Location Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).	
sacList	List of Service Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).	
gcaList	List of Group Call Area (Ref. 3GPP TS 23.003 [19]).	
mscId	Unique MSC ID (Ref. 3GPP TS 23.002 [15]).	
mccList	List of Mobile Country Codes, MCC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).	
mncList	List of Mobile Network Codes, MNC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).	
mscServerFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
vlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
aucFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
eirFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smsIwmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smsGmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sgsnFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sgsnId	Unique SGSN ID (Ref. 3GPP TS 23.002 [15]).	
ggsnFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
bgFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smleFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gmleFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sefFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
srfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	

<u>slfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>bgefFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mrfcFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mrfpFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>asFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	
<u>mgcfFunctionId</u>	<u>An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance</u>	

End of Change in Clause 6.5.1

CHANGE REQUEST

⌘ **32.632 CR 013** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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

Title:	⌘ Add restart notification to GSN objects using "proceduralStatus" attribute and notifyStateChange notification	
Source:	⌘ SA5 (llrui@bupt.edu.cn, liyewen@chinamobile.com)	
Work item code:	⌘ OAM-NIM	Date: ⌘ 19/11/2004
Category:	⌘ B	Release: ⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ The network services may be greatly affected when some equipments shut down and restart frequently. A notification which indicates the restart of an equipment would be helpful for an IRPManager to analysis and solve the potential problem and to reduce the potential effect on network services.
Summary of change:	⌘ Add restart notification to GSN objects using "proceduralStatus" attribute and notifyStateChange notification.
Consequences if not approved:	⌘

Clauses affected:	⌘ 2, 6.3.9, 6.3.10, 6.5.1									
Other specs affected:	<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	Y	N		X		X	X		⌘ Rel-6 32.633, 32.634, 32.635
Y	N									
	X									
	X									
X										
Other comments:	⌘ Child 32.633 CR in S5-047110. Corresponding 32.634, 32.635 CRs are not available yet.									

Change in Clause 2

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".
- [2] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [3] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point; Information Service (IS)".
- [4] - [6] Void.
- [7] ITU-T Recommendation X.710 (1991): "Common management information service definition for CCITT applications".
- [8] - [10] Void.
- [11] 3GPP TS 32.111-2: "Telecommunication management; Fault Management; Part 2: Alarm Integration Reference Point: Information Service (IS)".
- [12] Void.
- [13] 3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".
- [14] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".
- [15] 3GPP TS 23.002: "Network architecture".
- [16] 3GPP TS 32.622: "Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Network Resource Model (NRM)".
- [17] 3GPP TS 32.602: "Telecommunication management; Configuration Management (CM); Basic Configuration Management Integration Reference Point (IRP): Information Service (IS)".
- [18] 3GPP TS 23.060: "General Packet Radio Service (GPRS) service description; Stage 2".
- [19] 3GPP TS 23.003: "Numbering, addressing and identification".
- [20] [3GPP TS 32.672: "Telecommunication Management; Configuration Management \(CM\); State Management Integration Reference Point \(IRP\): Information Service \(IS\)".](#)

End of Change in Clause 2

Change in Clause 6.3.9

6.3.9 SgsnFunction

6.3.9.1 Definitions

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

6.3.9.2 Attributes

Table 6.3.9.1: Attributes of SgsnFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
sgsnFunctionId	+	M	M	-
userLabel	+	M	M	M
mccList	+	M	M	M
mncList	+	M	M	M
lacList	+	M	M	M
racList	+	M	M	M
sacList	+	M	M	M
sgsnId	+	M	M	M
sgsnFunction-GSMCell	+	M	M	-
sgsnFunction-ExternalGSMCell	+	M	M	-
proceduralStatus (Note)	%	O	-	-

[Note: This procedureStatus is not settable or readable via any Interface IRP except covered by notifyStateChange notifications.](#)

Table 6.3.9.2: Notifications of SgsnFunction

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])	
notifyStateChange	O	

End of Change in Clause 6.3.9

Change in Clause 6.3.10

6.3.10 GgsnFunction

6.3.10.1 Definitions

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

It inherits from ManagedFunction.

6.3.10.2 Attributes

Table 6.3.10.1: Attributes of GgsnFunction

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
ggsnFunctionId	+	M	M	-
userLabel	+	M	M	M
proceduralStatus (Note)	%	<u>O</u>	-	-

Note: This proceduralStatus is not settable or readable via any Interface IRP except covered by notifyStateChange notifications.

Table 6.3.10.2: Notifications of GgsnFunction

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])	
notifyStateChange	<u>O</u>	

End of Change in Clause 6.3.10

Change in Clause 6.5.1

6.5.1 Definition and legal values

Table 6.5.1 defines the attributes that are present in several information object classes of the present document.

Table 6.5.1: Attributes

Attribute Name	Definition	Legal Values
lacList	List of Location Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).	
sacList	List of Service Area Codes covered by MSC (Ref. 3GPP TS 23.003 [19]).	
gcaList	List of Group Call Area (Ref. 3GPP TS 23.003 [19]).	
mscId	Unique MSC ID (Ref. 3GPP TS 23.002 [15]).	
mccList	List of Mobile Country Codes, MCC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).	
mncList	List of Mobile Network Codes, MNC (part of the PLMN Id, Ref. 3GPP TS 23.003 [19]).	
mscServerFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
vlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
aucFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
eirFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smsIwmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smsGmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gmscFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sgsnFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sgsnId	Unique SGSN ID (Ref. 3GPP TS 23.002 [15]).	
ggsnFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
bgFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
smlcFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gmlcFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
scfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
srfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
cbcFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
cgfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
mgwFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	

gmscServerFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
mnpSrfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
npdbFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
sgwFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
ssfFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
bsFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iucslinkId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iupslinkId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iubclinkId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
aLinkId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
gbLinkId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
csmgwFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
hlrFunctionId	An attribute whose 'name+value' can be used as an RDN when naming an instance of the object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
userLabel	A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction.	
proceduralStatus	<p>It indicates the procedural status of the object instance. This attribute provides a subset of capabilities of procedural status defined in [20]. There are two cases resulting in a status change to be reported:</p> <ul style="list-style-type: none"> Case 1: A notification may be generated to indicate that restart procedure is about to begin or has just begun but has not finished. - the value for this attribute indicates original state == "notInitialized" and new state == "initializing". Case 2: A notification shall be generated to indicate that restart procedure has completed successfully - the value for this attribute indicates original state == "initializing" to new state == "" (empty set). 	<p>Subset of definitions from [20]: "notInitialized", "initializing", "" (empty set)</p>

End of Change in Clause 6.5.1
End of Document

CHANGE REQUEST

⌘ **32.633 CR 007** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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

Title:	⌘ Add new IMS Entities		
Source:	⌘ SA5 (islip@lucent.com)		
Work item code:	⌘ OAM-NIM	Date:	⌘ 19/11/2004
Category:	⌘ B	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ Addition of IMS entities to the CN NRM CORBA SS		
Summary of change:	⌘ Additional new clauses in section 5.2 to add mappings for the following new IOCs to Solution set MOC Amendment to Annex A to include the new MOCs in the CORBA IDL and align with CORBA SS style guide in TS 32.150 .		
Consequences if not approved:	⌘		

Clauses affected:	⌘ Section 1 IS version is updated to 6.1.0 Additional new clauses in section 5.2 to add mappings for the following new IOCs to Solution set MOC 5.2.32 ScscfFunction 5.2.33 PscsfFunction 5.2.34 IcscfFunction 5.2.35 SlfFunction 5.2.36 BgcFunction 5.2.37 MrfcFunction 5.2.38 MrfpFunction 5.2.39 AsFunction 5.2.40 MgcfcFunction Amend Annex A to add these new MOCs in the CORBA IDL .										
Other specs affected:	<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;">⌘</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	⌘	X	⌘	X	⌘	X	Other core specifications Test specifications O&M Specifications	⌘
Y	N										
⌘	X										
⌘	X										
⌘	X										
Other comments:	⌘ Parent 32.632 CR in S5-049006.										

Change:- section 1

1 Scope

The purpose of this *Core Network Resources IRP: CORBA Solution Set* is to define the mapping of the IRP information model (see TS 32.632 [3]) to the protocol specific details necessary for implementation of this IRP in a CORBA/IDL environment.

This Solution Set specification is related to 3GPP TS 32.632 V6.01.X.

End change:- section 1

Changes:- additions subsection to Clause 5.2

5.2.32 MOC ScscfFunction

Table 33: Mapping from NRM IOC ScscfFunction attributes to SS equivalent MOC ScscfFunction

<u>NRM Attributes of MOC ScscfFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
<u>scscfFunctionId</u>	<u>scscfFunctionId</u>	<u>string</u>	<u>Read-Only, M</u>
<u>userLabel</u>	<u>userLabel</u>	<u>string</u>	<u>Read-Write, M</u>

5.2.33 MOC PcscfFunction

Table 34: Mapping from NRM IOC PcscfFunction attributes to SS equivalent MOC PcscfFunction

<u>NRM Attributes of MOC PcscfFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
<u>pcscfFunctionId</u>	<u>pcscfFunctionId</u>	<u>string</u>	<u>Read-Only, M</u>
<u>userLabel</u>	<u>userLabel</u>	<u>string</u>	<u>Read-Write, M</u>

5.2.34 MOC IcsfFunction

Table 35: Mapping from NRM IOC IcsfFunction attributes to SS equivalent MOC IcsfFunction

<u>NRM Attributes of MOC IcsfFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
<u>icscfFunctionId</u>	<u>icscfFunctionId</u>	<u>string</u>	<u>Read-Only, M</u>
<u>userLabel</u>	<u>userLabel</u>	<u>string</u>	<u>Read-Write, M</u>

5.2.35 MOC SlfFunction

Table 36: Mapping from NRM IOC SlfFunction attributes to SS equivalent MOC SlfFunction

<u>NRM Attributes of MOC SlfFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
slfFunctionId	slfFunctionId	string	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.36 MOC BgcFunction

Table 37: Mapping from NRM IOC BgcFunction attributes to SS equivalent MOC BgcFunction

<u>NRM Attributes of MOC BgcFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
bgcFunctionId	bgcFunctionId	string	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.37 MOC MrfcFunction

Table 38: Mapping from NRM IOC BgcFunction attributes to SS equivalent MOC MrfcFunction

<u>NRM Attributes of MOC MrfcFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
mrfcFunctionId	mrfcFunctionId	string	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.38 MOC MrfpFunction

Table 39: Mapping from NRM IOC MrfpFunction attributes to SS equivalent MOC MrfpFunction

<u>NRM Attributes of MOC MrfpFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
rfpFunctionId	mrfpFunctionId	string	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.39 MOC AsFunction

Table 40: Mapping from NRM IOC AsFunction attributes to SS equivalent MOC AsFunction

<u>NRM Attributes of MOC AsFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
asFunctionId	asFunctionId	string	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.40 MOC MgcFunction

Table 42: Mapping from NRM IOC MgcFunction attributes to SS equivalent MOC MgcFunction

<u>NRM Attributes of MOC MgcFunction in TS 32.632 [3]</u>	<u>SS Attributes</u>	<u>SS Type</u>	<u>Qualifier</u>
<u>mgcfFunctionId</u>	<u>mgcfFunctionId</u>	<u>string</u>	<u>Read-Only, M</u>
<u>userLabel</u>	<u>userLabel</u>	<u>string</u>	<u>Read-Write, M</u>

End of Change in Clause 5.2

Annex A (normative): CORBA IDL, NRM Definitions

A.1 IDL specification (file name "CoreNetworkResourcesNRMDefs.idl")

```
// File CoreNetworkResourcesNRMDefs.idl
#ifndef CORENETWORKRESOURCESNRMDEFS_IDL CoreNetworkResourcesNRMDefs_idl
#define CORENETWORKRESOURCESNRMDEFS_IDL CoreNetworkResourcesNRMDefs_idl
#include "GenericNetworkResourcesNRMDefs.idl"

#pragma prefix "3gppsa5.org"

/**
 * This module defines constants for each MO class name and
 * the attribute names for each defined MO class.
 */
module CoreNetworkResourcesNRMDefs
{

    /**
     * Definitions for MO class MscServerFunction
     */
    interface MscServerFunction :
GenericNetworkResourcesNRMDefs::ManagedFunction
    {
        const string CLASS = "MscServerFunction";

        // Attribute Names
        //
        const string mscServerFunctionId = "mscServerFunctionId";
        const string mccList = "mccList";
        const string mncList = "mncList";
        const string lacList = "lacList";
        const string sacList = "sacList";
        const string gcaList = "gcaList";
        const string mscId = "mscId";
        const string mscServerFunctionGSMcell = "mscServerFunctionGSMcell";
        const string mscServerFunctionExternalGSMcell =
"mscServerFunctionExternalGSMcell";
        const string mscServerFunctionCsMgwFunction =
"mscServerFunctionCsMgwFunction";
    };

    /**
     * Definitions for MO class HlrFunction
     */
    interface HlrFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
    {
        const string CLASS = "HlrFunction";

        // Attribute Names
        //
        const string hlrFunctionId = "hlrFunctionId";
    };

    /**
     * Definitions for MO class VlrFunction

```

```
*/
interface VlrFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "VlrFunction";

    // Attribute Names
    //
    const string vlrFunctionId = "vlrFunctionId";
};

/**
 * Definitions for MO class AucFunction
 */
interface AucFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "AucFunction";

    // Attribute Names
    //
    const string aucFunctionId = "aucFunctionId";
};

/**
 * Definitions for MO class EirFunction
 */
interface EirFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "EirFunction";

    // Attribute Names
    //
    const string eirFunctionId = "eirFunctionId";
};

/**
 * Definitions for MO class SmsIwmscFunction
 */
interface SmsIwmscFunction :
GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SmsIwmscFunction";

    // Attribute Names
    //
    const string smsIwmscFunctionId = "smsIwmscFunctionId";
};

/**
 * Definitions for MO class SmsGmscFunction
 */
interface SmsGmscFunction :
GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SmsGmscFunction";

    // Attribute Names
    //
    const string smsGmscFunctionId = "smsGmscFunctionId";
};
```



```
/**
 * Definitions for MO class SgsnFunction
 */
interface SgsnFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SgsnFunction";

    // Attribute Names
    //
    const string sgsnFunctionId = "sgsnFunctionId";
    const string mccList = "mccList";
    const string mncList = "mncList";
    const string lacList = "lacList";
    const string racList = "racList";
    const string sacList = "sacList";
    const string sgsnId = "sgsnId";
    const string sgsnFunctionGSMcell = "sgsnFunctionGSMcell";
    const string sgsnFunctionExternalGSMcell = "sgsnFunctionExternalGSMcell";
};

/**
 * Definitions for MO class GgsnFunction
 */
interface GgsnFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "GgsnFunction";

    // Attribute Names
    //
    const string ggsnFunctionId = "ggsnFunctionId";
};

/**
 * Definitions for MO class BgFunction
 */
interface BgFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "BgFunction";

    // Attribute Names
    //
    const string bgFunctionId = "bgFunctionId";
};

/**
 * Definitions for MO class GmscFunction
 */
interface GmscFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "GmscFunction";

    // Attribute Names
    //
    const string gmscFunctionId = "gmscFunctionId";
};

/**
 * Definitions for MO class SmlcFunction
 */
interface SmlcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SmlcFunction";
```

```
// Attribute Names
//
const string smlcFunctionId = "smlcFunctionId";
};

/**
 * Definitions for MO class GmlcFunction
 */
interface GmlcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "GmlcFunction";

    // Attribute Names
    //
    const string gmlcFunctionId = "gmlcFunctionId";
};

/**
 * Definitions for MO class ScfFunction
 */
interface ScfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "ScfFunction";

    // Attribute Names
    //
    const string scfFunctionId = "scfFunctionId";
};

/**
 * Definitions for MO class SrfFunction
 */
interface SrfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SrfFunction";

    // Attribute Names
    //
    const string srfFunctionId = "srfFunctionId";
};

/**
 * Definitions for MO class CbcFunction
 */
interface CbcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "CbcFunction";

    // Attribute Names
    //
    const string cbcFunctionId = "cbcFunctionId";
};

/**
 * Definitions for MO class CgfFunction
 */
interface CgfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
```

```
    const string CLASS = "CgfFunction";

    // Attribute Names
    //
    const string cgfFunctionId = "cgfFunctionId";
};

/**
 * Definitions for MO class ImsMgwFunction
 */
interface ImsMgwFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "ImsMgwFunction";

    // Attribute Names
    //
    const string imsMgwFunctionId = "imsMgwFunctionId";
};

/**
 * Definitions for MO class GmscServerFunction
 */
interface GmscServerFunction :
GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "GmscServerFunction";

    // Attribute Names
    //
    const string gmscServerFunctionId = "gmscServerFunctionId";
};

/**
 * Definitions for MO class IwfFunction
 */
interface IwfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "IwfFunction";

    // Attribute Names
    //
    const string iwfunctionId = "iwfunctionId";
};

/**
 * Definitions for MO class MnpSrfFunction
 */
interface MnpSrfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "MnpSrfFunction";

    // Attribute Names
    //
    const string mnpSrfFunctionId = "mnpSrfFunctionId";
};

/**
 * Definitions for MO class NpdbFunction
 */
interface NpdbFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
```

```
const string CLASS = "NpdbFunction";

// Attribute Names
//
const string npdbFunctionId = "npdbFunctionId";
};

/**
 * Definitions for MO class SgwFunction
 */
interface SgwFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SgwFunction";

    // Attribute Names
    //
    const string sgwFunctionId = "sgwFunctionId";
};

/**
 * Definitions for MO class SsfFunction
 */
interface SsfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SsfFunction";

    // Attribute Names
    //
    const string ssfFunctionId = "ssfFunctionId";
};

/**
 * Definitions for MO class ScscfFunction
 */
interface ScscfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "ScscfFunction";

    // Attribute Names
    //
    const string scscfFunctionId = "scscfFunctionId";
};

/**
 * Definitions for MO class PcscfFunction
 */
interface PcscfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "PcscfFunction";
    // Attribute Names
    //
    const string pcscfFunctionId = "pcscfFunctionId";
};

/**
 * Definitions for MO class IcscfFunction
 */
interface IcscfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "IcscfFunction";
```

```

// Attribute Names
//
const string icscfFunctionId = "icscfFunctionId";
};

/**
 * Definitions for MO class SlfFunction
 */
interface SlfFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "SlfFunction";

    // Attribute Names
    //
    const string slfFunctionId = "slfFunctionId";
};

/**
 * Definitions for MO class BgcFunction
 */
interface BgcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "BgcFunction";

    // Attribute Names
    //
    const string bgcFunctionId = "bgcFunctionId";
};

/**
 * Definitions for MO class MrfcFunction
 */
interface MrfcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "MrfcFunction";

    // Attribute Names
    //
    const string mrfcFunctionId = "mrfcFunctionId";
};

/**
 * Definitions for MO class MrfpFunction
 */
interface MrfpFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "MrfpFunction";

    // Attribute Names
    //
    const string mrfpFunctionId = "mrfpFunctionId";
};

/**
 * Definitions for MO class AsFunction
 */
interface AsFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "AsFunction";
};
```

```

// Attribute Names
//
const string asFunctionId = "asFunctionId";
};

/**
 * Definitions for MO class MgcFunction
 */
interface MgcFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "MgcFunction";

    // Attribute Names
    //
const string mgcFunctionId = "mgcFunctionId";
};

/**
 * Definitions for MO class BsFunction
 */
interface BsFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "BsFunction";

    // Attribute Names
    //
const string bsFunctionId = "bsFunctionId";
};

/**
 * Definitions for MO class IucsLink
 */
interface IucsLink : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "IucsLink";

    // Attribute Names
    //
const string iucsLinkId = "iucsLinkId";
const string connectedRnc = "connectedRnc";
const string connectedBss = "connectedBss";
};

/**
 * Definitions for MO class IupsLink
 */
interface IupsLink : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "IupsLink";

    // Attribute Names
    //
const string iupsLinkId = "iupsLinkId";
const string connectedRnc = "connectedRnc";
const string connectedBss = "connectedBss";
};

/**
 * Definitions for MO class IubcLink
 */
```

```
interface IubcLink : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "IubcLink";

    // Attribute Names
    //
    const string iubcLinkId = "iubcLinkId";
    const string connectedRnc = "connectedRnc";
};

/**
 * Definitions for MO class ALink
 */
interface ALink : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "ALink";

    // Attribute Names
    //
    const string aLinkId = "aLinkId";
    const string connectedBss = "connectedBss";
};

/**
 * Definitions for MO class GbLink
 */
interface GbLink : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "GbLink";

    // Attribute Names
    //
    const string gbLinkId = "gbLinkId";
    const string connectedBss = "connectedBss";
};

/**
 * Definitions for MO class CsMgwFunction
 */
interface CsMgwFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
{
    const string CLASS = "CsMgwFunction";

    // Attribute Names
    //
    const string csMgwFunctionId = "csMgwFunctionId";
    const string csMgwFunctionMscServerFunction =
"csMgwFunctionMscServerFunction";
    const string csMgwFunctionIucsLink = "csMgwFunctionIucsLink";
    const string csMgwFunctionALink = "csMgwFunctionALink";
};

};

#endif // __CORENETWORKRESOURCESNRMDEFS_IDL__
```

CHANGE REQUEST

⌘ **32.633 CR 008** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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

Title:	⌘ Add restart notification to GSN objects using "proceduralStatus" attribute - Align with IS in 32.632		
Source:	⌘ SA5 (llrui@bupt.edu.cn, liyewen@chinamobile.com)		
Work item code:	⌘ OAM-NIM Date: ⌘ 19/11/2004		
Category:	⌘ B Release: ⌘ Rel-6		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Use <u>one</u> of the following categories:</i></p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Use <u>one</u> of the following releases:</i></p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p> </td> </tr> </table>	<p><i>Use <u>one</u> of the following categories:</i></p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use <u>one</u> of the following releases:</i></p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>
<p><i>Use <u>one</u> of the following categories:</i></p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use <u>one</u> of the following releases:</i></p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>		

Reason for change:	⌘ The network services may be greatly affected when some equipments shut down and restart frequently. A notification which indicates the restart of an equipment would be helpful for an IRPManager to analysis and solve the potential problem and to reduce the potential effect on network services.
Summary of change:	⌘ Add restart notification to GSN objects using "proceduralStatus" attribute.
Consequences if not approved:	⌘

Clauses affected:	⌘ 1, 5.2.8, 5.2.9					
Other specs affected:	<table border="1" style="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> </table>	Y	N	⌘	X	Other core specifications
	Y	N				
	⌘	X				
	⌘	X	Test specifications			
⌘	X	O&M Specifications				
Other comments:	⌘ Child to 32.632 CR in S5-047110					

1 Scope

The purpose of this *Core Network Resources IRP: CORBA Solution Set* is to define the mapping of the IRP information model (see TS 32.632 [3]) to the protocol specific details necessary for implementation of this IRP in a CORBA/IDL environment.

This Solution Set specification is related to 3GPP TS 32.632 V6.01.X.

Change in Clause 5.2.8

5.2.8 MOC SgsnFunction

Table 8: Mapping from NRM MOC SgsnFunction attributes to SS equivalent MOC SgsnFunction attributes

NRM Attributes of MOC SgsnFunction in TS 32.632 [3]	SS Attributes	SS Type	Qualifier
SgsnFunctionId sgsnFunctionId	sgsnFunctionId	string	Read-Only, M
UserLabel userLabel	userLabel	string	Read-Write, M
mccList	mccList	long	Read-Write, M
mncList	mncList	long	Read-Write, M
lacList	lacList	long	Read-Write, M
racList	racList	long	Read-Write, M
sacList	sacList	long	Read-Write, M
sgsnId	sgsnId	long	Read-Write, M
Associated With/ sgsnFunction-GSMCell	sgsnFunction-GSMCell	GenericNRIRPSystem::AttributeTypes::MOReference	Read-Only, M
Associated With/ sgsnFunction-ExternalGSMCell	sgsnFunction-ExternalGSMCell	GenericNRIRPSystem::AttributeTypes::MOReference	Read-Only, M
proceduralStatus	There is no corresponding SS attribute.		

End of Change in Clause 5.2.8

Change in Clause 5.2.9

5.2.9 MOC GgsnFunction

Table 9: Mapping from NRM MOC GgsnFunction attributes to SS equivalent MOC GgsnFunction attributes

NRM Attributes of MOC GgsnFunction in TS 32.632 [3]	SS Attributes	SS Type	Qualifier
GgsnFunctionId ggsnFunctionId	ggsnFunctionId	string	Read-Only, M
UserLabel userLabel	userLabel	string	Read- Write, M
proceduralStatus	There is no corresponding SS attribute.		

End of Change in Clause 5.2.9

CHANGE REQUEST

⌘ **32.635 CR 008** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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

Title:	⌘ Add new IMS Entities		
Source:	⌘ SA5 (mohanr@lucent.com)		
Work item code:	⌘ OAM-NIM	Date:	⌘ 19/11/2004
Category:	⌘ B	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ Introduce 3GPP standards for modelling of network elements in the IP Multimedia Subsystem		
Summary of change:	⌘ Added definitions for ScscfFunction, PcscfFunction, IcscfFunction, MrfcFunction, MrfpFunction, AsFunction, SlfFunction, BgcfFunction and Mgcfunction.		
Consequences if not approved:	⌘		

Clauses affected:	⌘ Sec 1, Annex A, Annex B										
Other specs affected:	<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;">⌘</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	⌘	X	⌘	X	⌘	X	Other core specifications Test specifications O&M Specifications	⌘
Y	N										
⌘	X										
⌘	X										
⌘	X										
Other comments:	⌘ Parent 32.632 CR in S5-049006.										

Change in Clause 1

1 Scope

The present document provides the NRM-specific part related to the Core Network Resources IRP NRM [1] of the XML file format definition for the Bulk Configuration Management IRP IS [2].

The main part of this XML file format definition is provided by 3GPP TS 32.615 [3].

Bulk CM XML file formats are based on XML [4], XML Schema [5] [6] [7] and XML Namespace [8] standards.

This File Format Definition specification is related to 3GPP TS 32.632 (V6.03.X).

End of Change in Clause 1

Change in Annex A

Annex A (normative): Configuration data file NRM-specific XML schema (file name "coreNrm.xsd")

The following XML schema `coreNrm.xsd` is the NRM-specific schema for the Core Network Resources IRP NRM defined in 3GPP TS 32.632 [1]:

```
<?xml version="1.0" encoding="UTF-8"?>

<!--
  3GPP TS 32.635 Core Network Resources IRP
  Bulk CM Configuration data file NRM-specific XML schema
  coreNrm.xsd
-->

<schema
  targetNamespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.635#coreNrm"
  elementFormDefault="qualified"
  xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
  xmlns:cn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.635#coreNrm"
>

  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
  />

  <!-- Core Network Resources IRP NRM class associated XML elements -->
```

```

<element
  name="MscServerFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="mccList" minOccurs="0"/>
                <element name="mncList" minOccurs="0"/>
                <element name="lacList" minOccurs="0"/>
                <element name="sacList" minOccurs="0"/>
                <element name="gcaList" minOccurs="0"/>
                <element name="mscId" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element name="mscServerFunctionGSMcell"/>
            <element name="mscServerFunctionExternalGSMcell"/>
            <element name="mscServerFunctionCsMgwFunction"/>
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

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  name="HlrFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="VlrFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>

```

```

<extension base="xn:NrmClass">
  <sequence>
    <element name="attributes" minOccurs="0">
      <complexType>
        <all>
          <element name="userLabel" minOccurs="0"/>
        </all>
      </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbounded">
      <element ref="xn:VsDataContainer"/>
    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="AucFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
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          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

    </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="GmscFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </all>
      </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbounded">
      <element ref="xn:VsDataContainer"/>
    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="mccList" minOccurs="0"/>
                <element name="mncList" minOccurs="0"/>
                <element name="lacList" minOccurs="0"/>
                <element name="racList" minOccurs="0"/>
                <element name="sacList" minOccurs="0"/>
                <element name="sgsnId" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element name="sgsnFunctionGSMcell"/>
            <element name="cn:sgsnFunctionExternalGSMcell"/>
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
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            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </extension>
    </complexContent>
</complexType>
</element>

<element
  name="BgFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
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            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="GmlcFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>

```



```

        <all>
            <element name="userLabel" minOccurs="0"/>
        </all>
    </complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
    <element ref="xn:VsDataContainer"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
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    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
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                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

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        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
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                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                                <element name="connectedRnc" minOccurs="0"/>
                                <element name="connectedBss" minOccurs="0"/>
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                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

<element name="IupsLink">

```

```

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      <sequence>
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          <complexType>
            <all>
              <element name="userLabel" minOccurs="0"/>
              <element name="connectedRnc" minOccurs="0"/>
              <element name="connectedBss" minOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>

<element name="IubcLink">
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    <complexContent>
      <extension base="xn:NrmClass">
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedRnc" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
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          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="ALink">
  <complexType>
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        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
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    </complexContent>
  </complexType>
</element>

```

```

    </complexType>
</element>

<element name="GbLink">
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
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          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbounded">
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    </choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
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    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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        <complexContent>
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                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

<element
    name="ImsMgwFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

<element
    name="GmscServerFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>

```

```

<complexType>
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          <complexType>
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              <element name="userLabel" minOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="MnpSrfFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
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      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </extension>
    </complexContent>
</complexType>
</element>

<element
  name="NpdbFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SgwFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
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<element
  name="SsfFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
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            <complexType>

```

```

        <all>
            <element name="userLabel" minOccurs="0"/>
        </all>
    </complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
    <element ref="xn:VsDataContainer"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

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    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
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        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
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                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

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    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
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                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                                <element name="csMgwFunctionMscServerFunction" minOccurs="0"/>
                                <element name="csMgwFunctionIucsLink" minOccurs="0"/>
                                <element name="csMgwFunctionALink" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

```

```

    </extension>
  </complexContent>
</complexType>
</element>

```

```

<element
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  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
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            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

<element
  name="PcscfFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
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    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

<element
  name="IcscfFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>

```



```

        <all>
        <element name="userLabel" minOccurs="0"/>
        </all>
    </complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
    <element ref="xn:VsDataContainer"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
    name="SlfFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
    >
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

<element
    name="BgcfFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
    >
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <element name="userLabel" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <choice minOccurs="0" maxOccurs="unbounded">
                        <element ref="xn:VsDataContainer"/>
                    </choice>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

<element

```

```

name="MrfcFunction"
substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
<complexType>
  <complexContent>
    <extension base="xn:NrmClass">
      <sequence>
        <element name="attributes" minOccurs="0">
          <complexType>
            <all>
              <element name="userLabel" minOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>

<element
  name="MrfpFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="AsFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">

```

```

        <element ref="xn:VsDataContainer"/>
    </choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="MgcfFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

</schema>

```

End of Change in Annex A

Change in Annex B

Annex B (informative): XML schema electronic files

The electronic files corresponding to the normative XML schemas defined in the present document are available in native form in the following archive:

http://www.3gpp.org/ftp/specs/archive/32_series/32.635/schema/32635-61540-XMLSchema.zip

**End of Change in Annex B
End of Document**