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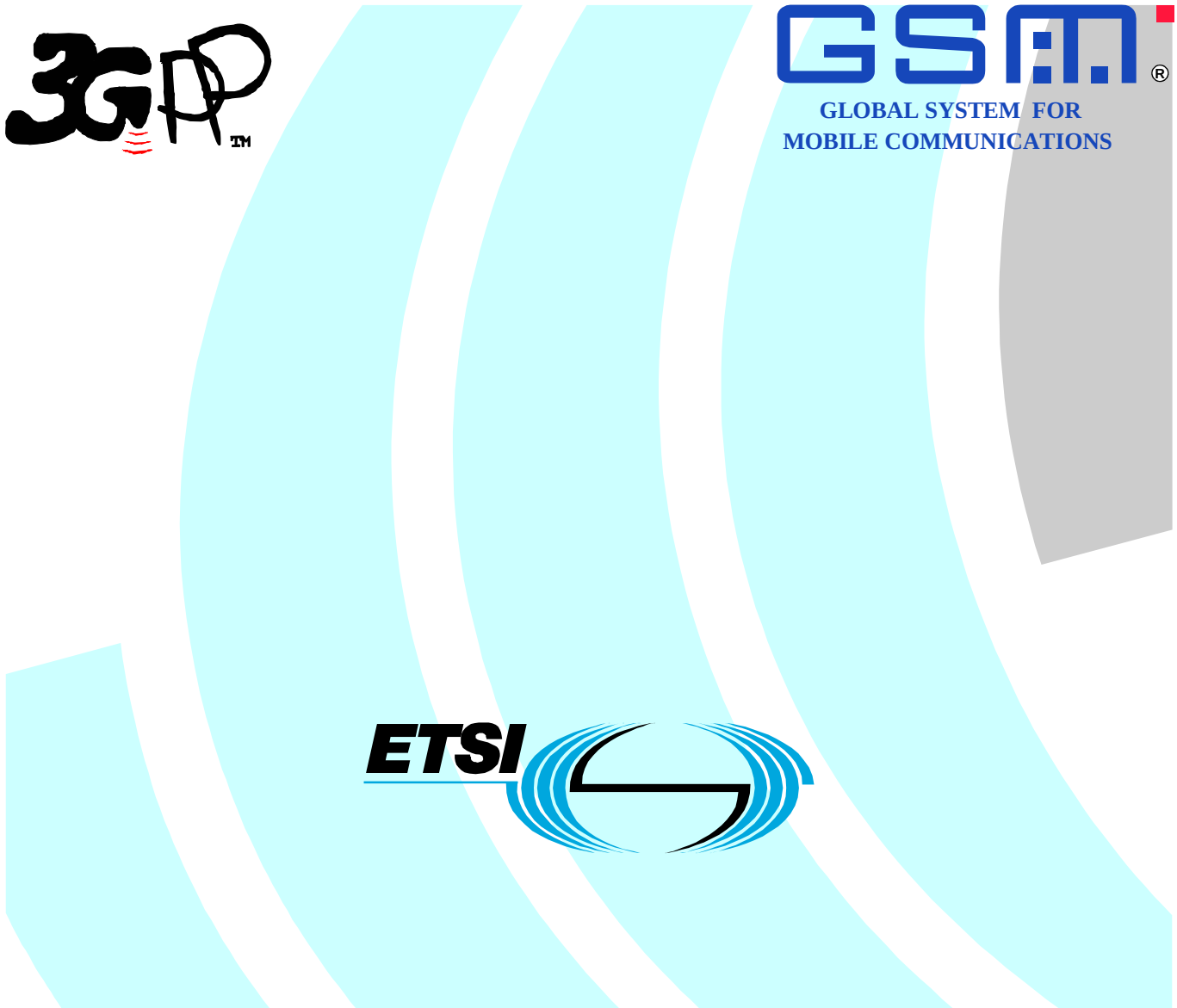
Technical Specification

Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
Telecommunication management;
Configuration Management (CM);
Core network resources Integration Reference Point (IRP):
CMIP solution set
(3GPP TS 32.634 version 4.1.1 Release 4)



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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
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Foreword

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

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Introduction

Configuration Management (CM), in general, provides the operator with the ability to assure correct and effective operation of the 3G network as it evolves. CM actions have the objective to control and monitor the actual configuration on the Network Elements (NEs) and Network Resources (NRs), and they may be initiated by the operator or by functions in the Operations Systems (OSs) or NEs.

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

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

The following table shows an overview of the mapping between the old Release 1999 and new Release 4 CM specification structure.

Table: Mapping between Release '99 and the new Rel-4 specifications

R99 Old no.	Old (R99) specification title	Rel-4 New no.	New (Rel-4) specification title
32.106-1	3G Configuration Management: Concept and Requirements	32.600	**3G Configuration Management**: **Concept and High-level Requirements**
32.106-1	<Notification IRP requirements from 32.106-1 and 32.106-2>	32.301	**Notification IRP**: Requirements
32.106-2	Notification IRP: IS	32.302	Notification IRP: Information Service
32.106-3	Notification IRP: CORBA SS	32.303	Notification IRP: CORBA SS
32.106-4	Notification IRP: CMIP SS	32.304	Notification IRP: CMIP SS
32.106-8	Name convention for Managed Objects	32.300	**Name Convention for Managed Objects**
32.106-1	<Basic CM IRP IS requirements from 32.106-1 and 32.106-5>	32.601	**Basic CM IRP**: Requirements
32.106-5	Basic CM IRP IM (Intro & IS part)	32.602	Basic CM IRP: Information Service
32.106-6	Basic CM IRP CORBA SS (IS related part)	32.603	Basic CM IRP: CORBA SS
32.106-7	Basic CM IRP CMIP SS (IS related part)	32.604	Basic CM IRP: CMIP SS
32.106-8	Name convention for Managed Objects	32.300	**Name Convention for Managed Objects**
-	-	32.611	**Bulk CM IRP**: Requirements
-	-	32.612	Bulk CM IRP: Information Service
-	-	32.613	Bulk CM IRP: CORBA SS
-	-	32.614	Bulk CM IRP: CMIP SS
		32.615	Bulk CM IRP: XML file format definition
32.106-1	<Basic CM IRP Generic NRM requirements from 32.106-1 and 32.106-5>	32.621	**Generic Network Resources IRP**: Requirements
32.106-5	Basic CM IRP IM (Generic NRM part)	32.622	Generic Network Resources IRP: NRM
32.106-6	Basic CM IRP CORBA SS (Generic NRM related part)	32.623	Generic Network Resources IRP: CORBA SS
32.106-7	Basic CM IRP CMIP SS (Generic NRM related part)	32.624	Generic Network Resources IRP: CMIP SS
32.106-1	<Basic CM IRP CN NRM requirements from 32.106-1 and 32.106-5>	32.631	**Core Network Resources IRP**: Requirements
32.106-5	Basic CM IRP IM (CN NRM part)	32.632	Core Network Resources IRP: NRM
32.106-6	Basic CM IRP CORBA SS (CN NRM related part)	32.633	Core Network Resources IRP: CORBA SS
32.106-7	Basic CM IRP CMIP SS (CN NRM related part)	32.634	Core Network Resources IRP: CMIP SS
32.106-1	<Basic CM IRP UTRAN NRM requirements from 32.106-1 and 32.106-5>	32.641	**UTRAN Network Resources IRP**: Requirements
32.106-5	Basic CM IRP IM (UTRAN NRM part)	32.642	UTRAN Network Resources IRP: NRM
32.106-6	Basic CM IRP CORBA SS (UTRAN NRM related part)	32.643	UTRAN Network Resources IRP: CORBA SS
32.106-7	Basic CM IRP CMIP SS (UTRAN NRM related part)	32.644	UTRAN Network Resources IRP: CMIP SS
		32.651	**GERAN Network Resources IRP**: Requirements
		32.652	GERAN Network Resources IRP: NRM
		32.653	GERAN Network Resources IRP: CORBA SS
		32.654	GERAN Network Resources IRP: CMIP SS

1 Scope

The present document specifies the Common Management Information Protocol (CMIP) Solution Set (SS) for the CN Network Resource Integration Reference Point (IRP): Network Resource Model defined in 3GPP TS 32.632. In detail:

- Clause 4 contains an introduction to some concepts that are the base for some specific aspects of the CMIP interfaces.
- Clause 5 contains the GDMO definitions for the Alarm Management over the CMIP interfaces
- Clause 6 contains the ASN.1 definitions supporting the GDMO definitions provided in clause 5.

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: "3G Telecom Management principles and high level requirements".

[2] 3GPP TS 32.102: "3G Telecom Management architecture".

[3] 3GPP TS 32.304: "Telecommunication Management; Notification Management; Part 4: Notification Integration Reference Point; CMIP Solution Set".

[4] 3GPP TS 32.632: "Telecommunication Management; Configuration Management: CN Network Resource Integration Reference Point: Network Resource Model".

[5] ITU-T Recommendation X.710 (1991): "Common Management Information Service Definition for CCITT Applications".

[6] ITU-T Recommendation X.721 (02/92): "Information Technology - Open Systems Interconnection – Structure of Management Information: Definition of Management Information".

[7] ITU-T Recommendation X.730 (01/92): "Information Technology - Open Systems Interconnection – Systems Management: Object Management Function".

[8] ITU-T Recommendation X.733 (02/92): "Information Technology - Open Systems Interconnection - Alarm Reporting Function".

[9] ITU-T Recommendation M.3100 (07/95): "Maintenance Telecommunications Management Network – Generic Network Information Model".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 32.600 and 3GPP TS 32.632 apply.

3.2 Abbreviations

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

CMIP	Common Management Information Protocol
DN	Distinguished Name
GDMO	Guidelines for the Definition of Managed Objects
IDL	Interface Definition Language
IEC	International Electro-technical Commission
ISO	International Standards Organization
ITU-T	International Telecommunication Union, Telecommunication Sector
MIB	Management Information Base
MIM	Management Information Model
MIT	Management Information Tree (or Naming Tree)
MOC	Managed Object Class
MOI	Managed Object Instance
NE	Network Element
NR	Network Resource
NRM	Network Resource Model
TMN	Telecommunications Management Network
UTRAN	UMTS Terrestrial Radio Access Network

4 Basic aspects

4.1 Explanation

A technology independent CN network resource model is defined in 3GPP TS 32.632 for 3G networks. This document provides an implementation of this CN network resource model by using CMIP technology.

4.2 Mapping

The semantic of the CN Network Resource Model is defined in 3GPP TS 32.632. The specification of the information object classes defined there is independent of any implementation technology and protocol.
This subclause maps these technology and protocol independent definitions onto the equivalencies of the CMIP Solution Set of the UTRAN Network Resource IRP.

4.2.1 Mapping of MOCs

Table 2 maps the information object classes defined in the CN Network Resource Model onto the equivalent MOCs of the CMIP Solution Set.

Table 1: Mapping of MOCs

Managed Objects of the CN NR IRP NRM	MOCs of this CMIP SS
AucFunction	aucFunction
BgFunction	bgFunction
EirFunction	eirFunction
GgsnFunction	ggsnFunction
GmscFunction	gmscFunction
HlrFunction	hlrFunction
MscFunction	mscFunction
SgsnFunction	sgsnFunction
SmsGmscFunction	smsGmscFunction
SmsIwmscFunction	smsIwmscFunction
VlrFunction	vlrFunction
SmlcFunction	smlcFunction
GmlcFunction	gmlcFunction
ScfFunction	scfFunction
SrfFunction	srfFunction
CbcFunction	cbcFunction
CqfFunction	cqfFunction
MgwFunction	mgwFunction
GmscFunction	gmscFunction
IwfFunction	iwfFunction
MnpSrfFunction	mnpSrfFunction
NpdbFunction	npdbFunction
RSgwFunction	rSgwFunction
SsfFunction	ssfFunction
BsFunction	bsFunction

4.2.2 Mapping of Attributes

Table 2: Mapping of Attributes

Attribute defined in 3GPP TS 32.632	Attribute defined in this CMIP SS
UserLabel	userLabel (ITU-T M.3100 1995)
aucFunctionId	aucFunctionId
bgFunctionId	bgFunctionId
eirFunctionId	eirFunctionId
ggsnFunctionId	ggsnFunctionId
gmscFunctionId	gmscFunctionId
hlrFunctionId	hlrFunctionId
mscFunctionId	mscFunctionId
vlrFunctionId	vlrFunctionId
sgsnFunctionId	sgsnFunctionId
smsGmscFunctionId	smsGmscFunctionId
smsIwmscFunctionId	smsIwmscFunctionId
smlcFunctionId	smlcFunctionId
gmlcFunctionId	gmlcFunctionId
scfFunctionId	scfFunctionId
srfFunctionId	srfFunctionId
cbcFunctionId	cbcFunctionId
cqfFunctionId	cqfFunctionId
mgwFunctionId	mgwFunctionId
gmscFunctionId	gmscFunctionId
iwfFunctionId	iwfFunctionId
mnpSrfFunctionId	mnpSrfFunctionId
npdbFunctionId	npdbFunctionId
rSgwFunctionId	rSgwFunctionId
ssfFunctionId	ssfFunctionId
bsFunctionId	bsFunctionId

5 GDMO Definitions

5.1 Managed Object Classes

5.1.1 smlcFunction

smlcFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
smlcFunctionBasicPackage PACKAGE
BEHAVIOUR **smlcFunctionBasicPackageBehaviour;**
ATTRIBUTES
smlcFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 1};

smlcFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents SMLC functionality. For more information about the SMLC, see 3GPP TS 23.002";

5.1.2 gmlcFunction

gmlcFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
gmlcFunctionBasicPackage PACKAGE
BEHAVIOUR **gmlcFunctionBasicPackageBehaviour;**
ATTRIBUTES
gmlcFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 2};

gmlcFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents GMLC functionality. For more information about the GMLC, see 3GPP TS 23.002";

5.1.3 scfFunction

scfFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
scfFunctionBasicPackage PACKAGE
BEHAVIOUR **scfFunctionBasicPackageBehaviour;**
ATTRIBUTES

scfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 3};

scfFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents SCF functionality. For more information about the SCF, see 3GPP TS 23.002";

5.1.4 srfFunction

srfFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
scfFunctionBasicPackage PACKAGE
BEHAVIOUR **srfFunctionBasicPackageBehaviour;**
ATTRIBUTES
srfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 4};

srfFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents SRF functionality. For more information about the SRF, see 3GPP TS 23.002";

5.1.5 cbcFunction

cbcFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
cbcFunctionBasicPackage PACKAGE
BEHAVIOUR **cbcFunctionBasicPackageBehaviour;**
ATTRIBUTES
cbcFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 5};

cbcFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents SBC functionality. For more information about the SBC, see 3GPP TS 23.002";

5.1.6 cgfFunction

cgfFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
cgfFunctionBasicPackage PACKAGE

BEHAVIOUR **cgfFunctionBasicPackageBehaviour;**
ATTRIBUTES
cgfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 6};

cgfFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents CGF functionality. For more information about the CGF, see 3GPP TS 23.002";

5.1.7 mgwFunction

mgwFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
mgwFunctionBasicPackage PACKAGE
BEHAVIOUR **mgwFunctionBasicPackageBehaviour;**
ATTRIBUTES
mgwFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 7};

mgwFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents MGW functionality. For more information about the MGW, see 3GPP TS 23.002";

5.1.8 gmscFunction

gmscFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
gmscFunctionBasicPackage PACKAGE
BEHAVIOUR **gmscFunctionBasicPackageBehaviour;**
ATTRIBUTES
gmscFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 8};

gmscFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents gmsc functionality. For more information about the gmsc, see 3GPP TS 23.002";

5.1.9 iwfFunction

iwfFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;

```
  CHARACTERIZED BY
    iwfFunctionBasicPackage PACKAGE
     BEHAVIOUR iwfFunctionBasicPackageBehaviour;
          ATTRIBUTES
     iwfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 9};


iwfFunctionBasicPackageBehaviour BEHAVIOUR
   DEFINED AS
    " This Managed Object Class represents IWF functionality. For more information about the IWF, see
3GPP TS 23.002";
```

5.1.10 mnpSrfFunction

```
mnpSrfFunction MANAGED OBJECT CLASS
  DERIVED FROM      "3GPP TS 32.624 Release 4": managedFunction;
  CHARACTERIZED BY
    mnpSrfFunctionBasicPackage PACKAGE
     BEHAVIOUR mnpSrfFunctionBasicPackageBehaviour;
          ATTRIBUTES
     mnpSrfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 10};


mnpSrfFunctionBasicPackageBehaviour BEHAVIOUR
   DEFINED AS
    " This Managed Object Class represents MNPSRF functionality. For more information about the
MNPSRF, see 3GPP TS 23.002";
```

5.1.11 npdbFunction

```
npdbFunction MANAGED OBJECT CLASS
  DERIVED FROM      "3GPP TS 32.624 Release 4": managedFunction;
  CHARACTERIZED BY
    mpdbFunctionBasicPackage PACKAGE
     BEHAVIOUR npdbFunctionBasicPackageBehaviour;
          ATTRIBUTES
     npdbFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 11};


npdbFunctionBasicPackageBehaviour BEHAVIOUR
   DEFINED AS
    " This Managed Object Class represents NPDB functionality. For more information about the NPDB,
see 3GPP TS 23.002";
```

5.1.12 rSgwFunction

rSgwFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
rSgwFunctionBasicPackage PACKAGE
BEHAVIOUR **rSgwFunctionBasicPackageBehaviour;**
ATTRIBUTES
rSgwFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 12};

rSgwFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents R-SGW functionality. For more information about the R-SGW, see 3GPP TS 23.002";

5.1.13 ssfFunction

ssfFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
ssfFunctionBasicPackage PACKAGE
BEHAVIOUR **ssfFunctionBasicPackageBehaviour;**
ATTRIBUTES
ssfFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 13};

ssfFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
" This Managed Object Class represents SSF functionality. For more information about the SSF, see 3GPP TS 23.002";

5.1.14 bsFunction

bsFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
bsFunctionBasicPackage PACKAGE
BEHAVIOUR **bsFunctionBasicPackageBehaviour;**
ATTRIBUTES
bsFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 14};

bsFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS

" This Managed Object Class represents BS functionality. For more information about the BS, see 3GPP TS 23.002";

5.1.15 aucFuntion

aucFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
aucFunctionBasicPackage PACKAGE
BEHAVIOUR aucFunctionBasicPackageBehaviour;
ATTRIBUTES
aucFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 15};

aucFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
"An instance of MOC represents the logical function of an AUC";

5.1.16 bgFunction

bgFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
bgFunctionBasicPackage PACKAGE
BEHAVIOUR
bgFunctionBasicPackageBehaviour;
ATTRIBUTES
bgFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 16};

bgFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
"An instance of MOC represents the logical function of an BG";

5.1.17 eirFunction

eirFunction MANAGED OBJECT CLASS
DERIVED FROM "3GPP TS 32.624 Release 4": managedFunction;
CHARACTERIZED BY
eirFunctionBasicPackage PACKAGE
BEHAVIOUR
eirFunctionBasicPackageBehaviour;
ATTRIBUTES

```
      eirFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 17};

eirFunctionBasicPackageBehaviour BEHAVIOUR
        DEFINED AS
      "An instance of MOC represents the logical function of an EIR";
```

5.1.18 ggsnFunction

```
ggsnFunction MANAGED OBJECT CLASS
  DERIVED FROM      "3GPP TS 32.624 Release 4":  managedFunction;
  CHARACTERIZED BY
     ggsnFunctionBasicPackage PACKAGE
       BEHAVIOUR
       ggsnFunctionBasicPackageBehaviour;
     ATTRIBUTES
      ggsnFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 18};

ggsnFunctionBasicPackageBehaviour BEHAVIOUR
    DEFINED AS
      "An instance of MOC represents the logical function of an GGSN";;
```

5.1.19 hlrFunction

```
hlrFunction MANAGED OBJECT CLASS
  DERIVED FROM      "3GPP TS 32.624 Release 4":   managedFunction;
  CHARACTERIZED BY
     hlrFunctionBasicPackage PACKAGE
      BEHAVIOUR
       hlrFunctionBasicPackageBehaviour;
     ATTRIBUTES
      hlrFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 19};

hlrFunctionBasicPackageBehaviour BEHAVIOUR
    DEFINED AS
      "An instance of MOC represents the logical function of a HLR";;
```

5.1.20 mscFunction

```
mscFunction MANAGED OBJECT CLASS
  DERIVED FROM      "3GPP TS 32.624 Release 4":  managedFunction;
  CHARACTERIZED BY
     mscFunctionBasicPackage PACKAGE
```

```
      BEHAVIOUR
      mscFunctionBasicPackageBehaviour;
        ATTRIBUTES
      mscFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 21};

mscFunctionBasicPackageBehaviour BEHAVIOUR
    DEFINED AS
      "An instance of MOC represents the logical function of a MSC";;
```

5.1.21 sgsnFunction

```
sgsnFunction MANAGED OBJECT CLASS
  DERIVED FROM     “3GPP TS 32.624 Release 4”:   managedFunction;
  CHARACTERIZED BY
     sgsnFunctionBasicPackage PACKAGE
       BEHAVIOUR
       sgsnFunctionBasicPackageBehaviour;
         ATTRIBUTES
      sgsnFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 22};

sgsnFunctionBasicPackageBehaviour BEHAVIOUR
    DEFINED AS
      "An instance of MOC represents the logical function of an SGSN";;
```

5.1.22 smsGmscFunction

```
smsGmscFunction MANAGED OBJECT CLASS
  DERIVED FROM     “3GPP TS 32.624 Release 4”:   managedFunction;
  CHARACTERIZED BY
     smsGmscFunctionBasicPackage PACKAGE
       BEHAVIOUR
       smsGmscFunctionBasicPackageBehaviour;
         ATTRIBUTES
      smsGmscFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 23};

smsGmscFunctionBasicPackageBehaviour BEHAVIOUR
    DEFINED AS
      "An instance of MOC represents the logical function of an smsGMSC";;
```

5.1.23 smsIwmscFunction

```
smsIwmscFunction MANAGED OBJECT CLASS
```

```
  DERIVED FROM      “3GPP TS 32.624 Release 4”:  managedFunction;
  CHARACTERIZED BY
    smsIwmscFunctionBasicPackage PACKAGE
      BEHAVIOUR
      smsIwmscFunctionBasicPackageBehaviour;
        ATTRIBUTES
     smsIwmscFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 24};

smsIwmscFunctionBasicPackageBehaviour BEHAVIOUR
   DEFINED AS
     "An instance of MOC represents the logical function of an smsIWMSC";;
```

5.1.24 vlrFunction

```
vlrFunction MANAGED OBJECT CLASS
  DERIVED FROM      “3GPP TS 32.624 Release 4”:  managedFunction;
  CHARACTERIZED BY
    vlrFunctionBasicPackage PACKAGE
      BEHAVIOUR
       vlrFunctionBasicPackageBehaviour;
        ATTRIBUTES
     vlrFunctionId GET;;;
REGISTERED AS {ts32-634ObjectClass 25};

vlrFunctionBasicPackageBehaviour BEHAVIOUR
   DEFINED AS
     "An instance of MOC represents the logical function of a VLR";;
```

5.2 Attributes

5.2.1 smlcFunctionId

smlcFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    smlcFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 1};

smlcFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a smlcFunction instance.";

5.2.2 gmlcFunctionId

gmlcFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    gmlcFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 2};

gmlcFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a gmlcFunction instance.";

5.2.3 scfFunctionId

scfFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    scfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 3};

scfFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a scfFunction instance.";

5.2.4 srfFunctionId

srfFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;

```
  BEHAVIOUR
    srfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 4};

srfFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a srfFunction instance.";
```

5.2.5 cbcFunctionId

```
cbcFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    cbcFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 5};

cbcFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a cbcFunction instance.";
```

5.2.6 cgfFunctionId

```
cgfFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    cgfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 6};

cgfFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a cgfFunction instance.";
```

5.2.7 mgwFunctionId

```
mgwFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    mgwFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 7};

mgwFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a mgwFunction instance.";
```

5.2.8 gmscFunctionId

gmscFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    gmscFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 8};

gmscFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a gmscFunction instance.";

5.2.9 iwfFunctionId

iwfFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    iwfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 9};

iwfFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a iwfFunction instance.";

5.2.10 mnpSrfFunctionId

mnpSrfFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    mnpSrfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 10};

mnpSrfFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a mnpSrfFunction instance.";

5.2.11 npdbFunctionId

npdbFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    npdbFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 11};

npdbFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a npdbFunction instance.";

5.2.12 rSgwFunctionId

rSgwFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
rSgwFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 12};

rSgwFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a rSgwFunction instance.";

5.2.13 ssfFunctionId

ssfFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
ssfFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 13};

ssfFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a ssfFunction instance.";

5.2.14 bsFunctionId

bsFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
bsFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 14};

bsFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a bsFunction instance.";

5.2.15 aucFunctionId

aucFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    aucFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 15};

aucFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a aucFunction instance.";

5.2.16 bgFunctionId

bgFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    bgFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 16};

bgFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a bgFunction instance.";

5.2.17 eirFunctionId

eirFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    eirFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 17};

eirFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a eirFunction instance.";

5.2.18 ggsnFunctionId

ggsnFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;

```
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    ggsnFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 18};

ggsnFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a ggsnFunction instance.";
```

5.2.19 gmscFunctionId

```
gmscFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    gmscFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 19};

gmscFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a gmscFunction instance.";
```

5.2.20 hlrFunctionId

```
hlrFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    hlrFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 20};

hlrFunctionIdBehaviour BEHAVIOUR
  DEFINED AS
    " This attribute identifies a hlrFunction instance.";
```

5.2.21 mscFunctionId

```
mscFunctionId ATTRIBUTE
  WITH ATTRIBUTE SYNTAX    TS32-634TypeModule.GeneralObjectId;
  MATCHES FOR EQUALITY;
  BEHAVIOUR
    mscFunctionIdBehaviour;
```

REGISTERED AS {ts32-634Attribute 21};

mscFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a mscFunction instance.";

5.2.22 vlrFunctionId

vlrFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
vlrFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 22};

vlrFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a vlrFunction instance.";

5.2.23 sgsnFunctionId

sgsnFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
sgsnFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 23};

sgsnFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a sgsnFunction instance.";

5.2.24 smsGmscFunctionId

smsGmscFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
smsGmscFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 24};

smsGmscFunctionIdBehaviour BEHAVIOUR

DEFINED AS
" This attribute identifies a smsGmscFunction instance.";

5.2.25 smsIwmscFunctionId

smsIwmscFunctionId ATTRIBUTE
WITH ATTRIBUTE SYNTAX TS32-634TypeModule.GeneralObjectId;
MATCHES FOR EQUALITY;
BEHAVIOUR
smsIwmscFunctionIdBehaviour;
REGISTERED AS {ts32-634Attribute 25};

smsIwmscFunctionIdBehaviour BEHAVIOUR
DEFINED AS
" This attribute identifies a smsIwmscFunction instance.";

5.3 Name Binding

5.3.1 smlcFunction - managedElement

smlcFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS smlcFunction;
NAMED BY SUPERIOR OBJECT CLASS "3GPP TS 32.624 Release 4": WITH ATTRIBUTE smlcFunctionId;
BEHAVIOUR
smlcFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 1};

smlcFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a smlcFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.2 gmlcFunction - managedElement

gmlcFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS gmlcFunction;
NAMED BY SUPERIOR OBJECT CLASS "3GPP TS 32.624 Release 4": WITH ATTRIBUTE gmlcFunctionId;
BEHAVIOUR
gmlcFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 2};

gmlcFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a gmlcFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.3 scfFunction - managedElement

scfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS scfFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE scfFunctionId;
BEHAVIOUR
scfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 3};

scfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a scfFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.4 srfFunction - managedElement

srfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS srfFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE srfFunctionId;
BEHAVIOUR
srfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 4};

srfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a srfFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.5 cbcFunction - managedElement

cbcFunction-managedElement NAME BINDING

SUBORDINATE OBJECT CLASS cbcFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE cbcFunctionId;
BEHAVIOUR
cbcFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 5};

cbcFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a cbcFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.6 cgfFunction - managedElement

cgfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS cgfFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE cgfFunctionId;
BEHAVIOUR
cgfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 6};

cgfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a cgfFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.7 mgwFunction - managedElement

mgwFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS mgwFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE mgwFunctionId;
BEHAVIOUR
mgwFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 7};

mgwFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and

controls a mgwFunction. When automatic instance naming is used, the choice
of name bindings is left as a local matter.";

5.3.8 gmscFunction - managedElement

gmscFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS gmscFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE gmscFunctionId;
BEHAVIOUR
gmscFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 8};

gmscFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and
controls a gmscFunction. When automatic instance naming is used, the choice
of name bindings is left as a local matter.";

5.3.9 iwfFunction - managedElement

iwfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS iwfFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE iwfFunctionId;
BEHAVIOUR
iwfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 9};

iwfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and
controls a iwfFunction. When automatic instance naming is used, the choice
of name bindings is left as a local matter.";

5.3.10 mnpSrfFunction - managedElement

mnpSrfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS mnpSrfFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE mnpSrfFunctionId;
BEHAVIOUR
mnpSrfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-634NameBinding 10};

mnpSrfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a mnpSrfFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.11 npdbFunction - managedElement

npdbFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS npdbFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE npdbFunctionId;
BEHAVIOUR
npdbFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 11};

npdbFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a npdbFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.12 rSgwFunction - managedElement

rSgwFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS rSgwFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE rSgwFunctionId;
BEHAVIOUR
rSgwFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 12};

rSgwFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a rSgwFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.13 ssfFunction - managedElement

ssfFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS ssfFunction;

NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE ssfFunctionId;
BEHAVIOUR
ssfFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 13};

ssfFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a ssfFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.14 bsFunction - managedElement

bsFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS bsFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: WITH ATTRIBUTE bsFunctionId;
BEHAVIOUR
bsFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 14};

bsFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a bsFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.15 aucFunction - managedElement

aucFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS aucFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE aucFunctionId;
BEHAVIOUR
aucFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 15};

aucFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS

"The name binding represents a relationship in which a managedElement contains and controls a aucFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.16 bgFunction - managedElement

bgFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS bgFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE bgFunctionId;
BEHAVIOUR
bgFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 16};

bgFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a bgFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.17 eirFunction - managedElement

eirFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS eirFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE eirFunctionId;
BEHAVIOUR
eirFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 17};

eirFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a eirFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.18 ggsnFunction - managedElement

ggsnFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS ggsnFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;

```
  WITH ATTRIBUTE ggsnFunctionId;
  BEHAVIOUR
    ggsnFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 18};

ggsnFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
    "The name binding represents a relationship in which a managedElement contains and
    controls a ggsnFunction. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

5.3.19 gmscFunction - managedElement

```
gmscFunction-managedElement NAME BINDING
  SUBORDINATE OBJECT CLASS gmscFunction;
  NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
  WITH ATTRIBUTE gmscFunctionId;
  BEHAVIOUR
    gmscFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 19};

gmscFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
    "The name binding represents a relationship in which a managedElement contains and
    controls a gmscFunction. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

5.3.20 hlrFunction - managedElement

```
hlrFunction-managedElement NAME BINDING
  SUBORDINATE OBJECT CLASS hlrFunction;
  NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
  WITH ATTRIBUTE hlrFunctionId;
  BEHAVIOUR
    hlrFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 20};

hlrFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
```

"The name binding represents a relationship in which a managedElement contains and controls a hlrFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.21 mscFunction - managedElement

mscFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS mscFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE mscFunctionId;
BEHAVIOUR
mscFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 21};

mscFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a mscFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.22 vlrFunction - managedElement

vlrFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS vlrFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
WITH ATTRIBUTE vlrFunctionId;
BEHAVIOUR
vlrFunction-managedElementBehaviour;
CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 22};

vlrFunction-managedElementBehaviour BEHAVIOUR
DEFINED AS
"The name binding represents a relationship in which a managedElement contains and controls a vlrFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

5.3.23 sgsnFunction - managedElement

sgsnFunction-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS sgsnFunction;
NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;

```
  WITH ATTRIBUTE sgsnFunctionId;
  BEHAVIOUR
    sgsnFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 23};

sgsnFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
    "The name binding represents a relationship in which a managedElement contains and
    controls a sgsnFunction. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

5.3.24 smsGmscFunction - managedElement

```
smsGmscFunction-managedElement NAME BINDING
  SUBORDINATE OBJECT CLASS smsGmscFunction;
  NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
  WITH ATTRIBUTE smsGmscFunctionId;
  BEHAVIOUR
    smsGmscFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 24};

smsGmscFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
    "The name binding represents a relationship in which a managedElement contains and
    controls a smsGmscFunction. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

5.3.25 smsIwmscFunction - managedElement

```
smsIwmscFunction-managedElement NAME BINDING
  SUBORDINATE OBJECT CLASS smsIwmscFunction;
  NAMED BY SUPERIOR OBJECT CLASS “3GPP TS 32.624 Release 4”: managedElement;
  WITH ATTRIBUTE smsIwmscFunctionId;
  BEHAVIOUR
    smsIwmscFunction-managedElementBehaviour;
  CREATE WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
  DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-634NameBinding 25};

smsIwmscFunction-managedElementBehaviour BEHAVIOUR
  DEFINED AS
```

"The name binding represents a relationship in which a managedElement contains and controls a smsIwmscFunction. When automatic instance naming is used, the choice of name bindings is left as a local matter.";

6 ASN.1 Definitions

```
TS32-634TypeModule {ccitt (0) identified-organization (4) etsi (0)
        mobileDomain (0) umts-Operation-Maintenance (3) ts32-634 (634)
       informationModel (0) asn1Module (2) version1 (1)}



DEFINITIONS IMPLICIT TAGS ::=
BEGIN
--EXPORTS everything

IMPORTS
GeneralObjectId FROM  TS32-624TypeModule {ccitt (0) identified-organization (4) etsi (0)
        mobileDomain (0) umts-Operation-Maintenance (3) ts32-624 (624)
       informationModel (0) asn1Module (2) version1 (1)}


-- 3GPP TS 32.634 related Object Identifiers

baseNodeUMTS  OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0) mobileDomain(0)
                    umts-Operation-Maintenance(3)}
ts32-634       OBJECT IDENTIFIER ::= { baseNodeUMTS ts32-634(634)}
ts32-634InfoModel   OBJECT IDENTIFIER ::= { ts32-634 informationModel(0)}

ts32-634ObjectClass     OBJECT IDENTIFIER ::= { ts32-634InfoModel managedObjectClass(3)}
ts32-634Package      OBJECT IDENTIFIER ::= { ts32-634InfoModel package(4)}
ts32-634Parameter        OBJECT IDENTIFIER ::= { ts32-634InfoModel parameter(5)}
ts32-634NameBinding   OBJECT IDENTIFIER ::= { ts32-634InfoModel nameBinding(6)}
ts32-634Attribute        OBJECT IDENTIFIER ::= { ts32-634InfoModel attribute(7)}
ts32-634Action       OBJECT IDENTIFIER ::= { ts32-634InfoModel action(9)}
ts32-634Notification OBJECT IDENTIFIER ::= { ts32-634InfoModel notification(10)}


-- Start of 3gPP SA5 own definitions

END   -- of TS32-634TypeModule
```

Annex A (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2001	S_12	SP-010283	--	--	Approved at TSG SA #12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	S_13	SP-010478	001	--	Correction due to TS renumbering	4.0.0	4.1.0
Sep 2002	--	--	--	--	Cosmetics/Styles	4.1.0	4.1.1

History

Document history		
V4.0.0	June 2001	Publication
V4.1.0	September 2001	Publication (Withdrawn)
V4.1.1	September 2002	Publication