# 3GPP TS 32.621-3 V2.0.0 (2001-06)

*Technical Specification*

**3rd Generation Partnership Project;**
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**Core Network Resources IRP:**
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Postal address

3GPP support office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

http://www.3gpp.org

*3GPP*

# 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

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

# 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> | 32.301-1 | **Notification IRP**: Requirements |
| 32.106-2 | Notification IRP: IS | 32.301-2 | Notification IRP: Information Service |
| 32.106-3 | Notification IRP: CORBA SS | 32.301-3 | Notification IRP: CORBA SS |
| 32.106-4 | Notification IRP: CMIP SS | 32.301-4 | 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> | 32.601-1 | **Basic CM IRP**: Requirements |
| 32.106-5 | Basic CM IRP IM (Intro & IS part) | 32.601-2 | Basic CM IRP: Information Service |
| 32.106-6 | Basic CM IRP CORBA SS (IS related part) | 32.601-3 | Basic CM IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (IS related part) | 32.601-4 | Basic CM IRP: CMIP SS |
| 32.106-1 | <Basic CM IRP Generic NRM requirements from 32.106-1 and 32.106-5> | 32.620-1 | **Generic Network Resources IRP**: Requirements |
| 32.106-5 | Basic CM IRP IM (Generic NRM part) | 32.620-2 | Generic Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (Generic NRM related part) | 32.620-3 | Generic Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (Generic NRM related part) | 32.620-4 | Generic Network Resources IRP: CMIP SS |
| 32.106-1 | <Basic CM IRP CN NRM requirements from 32.106-1 and 32.106-5> | 32.621-1 | **Core Network Resources IRP**: Requirements |
| 32.106-5 | Basic CM IRP IM (CN NRM part) | 32.621-2 | Core Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (CN NRM related part) | 32.621-3 | Core Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (CN NRM related part) | 32.621-4 | Core Network Resources IRP: CMIP SS |
| 32.106-1 | <Basic CM IRP UTRAN NRM requirements from 32.106-1 and 32.106-5> | 32.622-1 | **UTRAN Network Resources IRP**: Requirements |
| 32.106-5 | Basic CM IRP IM (UTRAN NRM part) | 32.622-2 | UTRAN Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (UTRAN NRM related part) | 32.622-3 | UTRAN Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (UTRAN NRM related part) | 32.622-4 | UTRAN Network Resources IRP: CMIP SS |

This document constitutes 32.621 Part 3 - Core Network Resources IRP: CORBA Solution Set.

# 1 Scope

The purpose of this *Core Network Resources IRP: CORBA Solution Set* is to define the mapping of the IRP information model (see 3GPP TS 32.621-2 [3]) to the protocol specific details necessary for implementation of this IRP in a CORBA/IDL environment.

# 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 32.621-2: "Core Network Resources IRP: NRM".

[4]     3GPP TS 32.300: "Name Convention for Managed Objects".

[5]     3GPP TS 32.301-3: "Notification IRP: CORBA Solution Set".

# 3 Definitions and abbreviations

## 3.1 Definitions

For terms and definitions please refer to 3GPP TS 32.101 [1], 3GPP TS 32.102 [2] and 3GPP TS 32.621-2 [3].

## 3.2 Abbreviations

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

| | |
|---|---|
| CORBA | Common Object Request Broker Architecture |
| DN | Distinguished Name |
| IS | Information Service |
| IDL | Interface Definition Language (OMG) |
| IRP | Integration Reference Point |
| MO | Managed Object |
| MOC | Managed Object Class |
| NRM | Network Resource Model |
| OMG | Object Management Group |
| SS | Solution Set |

# 4 Architectural features

The overall architectural feature of Core Network Resources IRP is specified in 3GPP TS 32.621-2[3].
This clause specifies features that are specific to the CORBA SS.[3]

## 4.1 Notifications

Notifications are sent according to the Notification IRP: CORBA SS (see 3GPP TS 32.301-3 [5]).

# 5 Mapping

## 5.1 General mappings

The IS parameter name managedObjectInstance is mapped into DN.

Attributes modelling associations as defined in the NRM (here also called "reference attributes") are in this SS mapped
to attributes. The names of the reference attributes in the NRM are mapped to the corresponding attribute names in the
MOC. When the cardinality for an association is 0..1 or 1..1 the datatype for the reference attribute is defined as an
MOReference. The value of an MO reference contains the distinguished name of the associated MO. When the
cardinality for an association allows more than one referred MO, the reference attribute will be of type MOReferenceSet,
which contains a sequence of MO references.

If a reference attribute is changed, an AttributeValueChange notification is emitted.

## 5.2 Core Network NRM Managed Object Class (MOC) mapping

### 5.2.1 MOC `MscFunction`

**Table 1: Mapping from NRM `MOC` `MscFunction` attributes to SS equivalent MOC `MscFunction` attributes**

| NRM Attributes of MOC `MscFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| mscFunctionId | mscFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

### 5.2.2 MOC `HlrFunction`

**Table 2: Mapping from NRM `MOC` `HlrFunction` attributes to SS equivalent MOC `HlrFunction` attributes**

| NRM Attributes of MOC `HlrFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| hlrFunctionId | hlrFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

## 5.2.3  MOC VlrFunction

**Table 3: Mapping from NRM MOC VlrFunction attributes to SS equivalent MOC VlrFunction attributes**

| NRM Attributes of MOC VlrFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| vlrFunctionId | vlrFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

## 5.2.4  MOC AucFunction

**Table 4: Mapping from NRM MOC AucFunction attributes to SS equivalent MOC AucFunction attributes**

| NRM Attributes of MOC AucFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| aucFunctionId | aucFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

## 5.2.5  MOC EirFunction

**Table 5: Mapping from NRM MOC EirFunction attributes to SS equivalent MOC EirFunction attributes**

| NRM Attributes of MOC EirFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| EirFunctionId | eirFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.6  MOC SmsIwmscFunction

**Table 6: Mapping from NRM MOC SmsIwmscFunction attributes to SS equivalent MOC SmsIwmscFunction attributes**

| NRM Attributes of MOC SmsIwmscFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| smsIwmscFunctionId | smsIwmscFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

## 5.2.7  MOC SmsGmscFunction

**Table 7: Mapping from NRM MOC SmsGmscFunction attributes to SS equivalent MOC SmsGmscFunction attributes**

| NRM Attributes of MOC SmsGmscFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| SmsGmscFunctionId | smsGmscFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 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 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| SgsnFunctionId | sgsnFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 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 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| GgsnFunctionId | ggsnFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.10 MOC BgFunction

**Table 10: Mapping from NRM MOC BgFunction attributes to SS equivalent MOC BgFunction attributes**

| NRM Attributes of MOC BgFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| BgFunctionId | bgFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.11 MOC GmscFunction

**Table 11: Mapping from NRM MOC GmscFunction attributes to SS equivalent MOC GmscFunction attributes**

| NRM Attributes of MOC GmscFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| GmscFunctionId | gmscFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.12 MOC SmlcFunction

**Table 12: Mapping from NRM MOC SmlcFunction attributes to SS equivalent MOC SmlcFunction attributes**

| NRM Attributes of MOC SmlcFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| SmlcFunctionId | smlcFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.13   MOC `GmlcFunction`

**Table 13: Mapping from NRM MOC `GmlcFunction` attributes to SS equivalent MOC `GmlcFunction` attributes**

| NRM Attributes of MOC `GmlcFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| GmlcFunctionId | gmlcFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.14   MOC `ScfFunction`

**Table 14: Mapping from NRM MOC `ScfFunction` attributes to SS equivalent MOC `ScfFunction` attributes**

| NRM Attributes of MOC `ScfFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| ScfFunctionId | scfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.15   MOC `SrfFunction`

**Table 15: Mapping from NRM MOC `SrfFunction` attributes to SS equivalent MOC `SrfFunction` attributes**

| NRM Attributes of MOC `SrfFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| SrfFunctionId | srfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.16   MOC `CbcFunction`

**Table 16: Mapping from NRM MOC `CbcFunction` attributes to SS equivalent MOC `CbcFunction` attributes**

| NRM Attributes of MOC `CbcFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| CbcFunctionId | cbcFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.17   MOC `CgfFunction`

**Table 17: Mapping from NRM MOC `CgfFunction` attributes to SS equivalent MOC `CgfFunction` attributes**

| NRM Attributes of MOC `CgfFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| CgfFunctionId | cgfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

### 5.2.18 MOC MgwFunction

**Table 18: Mapping from NRM MOC MgwFunction attributes to SS equivalent MOC MgwFunction attributes**

| NRM Attributes of MOC MgwFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| MgwFunctionId | mgwFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

### 5.2.19 MOC GmscServerFunction

**Table 19: Mapping from NRM MOC GmscServerFunction attributes to SS equivalent MOC GmscServerFunction attributes**

| NRM Attributes of MOC GmscServerFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| GmscServerFunctionId | gmscServerFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

### 5.2.20 MOC IwfFunction

**Table 20: Mapping from NRM MOC IwfFunction attributes to SS equivalent MOC IwfFunction attributes**

| NRM Attributes of MOC IwfFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| IwfFunctionId | iwfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

### 5.2.21 MOC MnpSrfFunction

**Table 21: Mapping from NRM MOC MnpSrfFunction attributes to SS equivalent MOC IwfFunction attributes**

| NRM Attributes of MOC MnpSrfFunction in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| MnpSrfFunctionId | mnpSrfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.22 MOC NpdbFunction

**Table 22: Mapping from NRM MOC `NpdbFunction` attributes to SS equivalent MOC `NpdbFunction` attributes**

| NRM Attributes of MOC `NpdbFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| NpdbFunctionId | npdbFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.23 MOC RSgwFunction

**Table 23: Mapping from NRM MOC `RSgwFunction` attributes to SS equivalent MOC `RSgwFunction` attributes**

| NRM Attributes of MOC `Rsgw Function` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| RSgwFunctionId | rSgwFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.24 MOC SsfFunction

**Table 24: Mapping from NRM MOC `SsfFunction` attributes to SS equivalent MOC `SsfFunction` attributes**

| NRM Attributes of MOC `SsfFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| SsfFunctionId | ssfFunctionId | string | Read-Only, M |
| UserLabel | userLabel | string | Read-Only, M |

## 5.2.25 MOC BsFunction

**Table 25: Mapping from NRM MOC `BsFunction` attributes to SS equivalent MOC `BsFunction` attributes**

| NRM Attributes of MOC `BsFunction` in 3GPP TS 32.621-2 [3] | SS Attributes | SS Type | Qualifier |
|---|---|---|---|
| bsFunctionId | bsFunctionId | string | Read-Only, M |
| userLabel | userLabel | string | Read-Only, M |

# 6 Rules for NRM extensions

This clause discusses how the models and IDL definitions provided in the present document can be extended for a particular implementation and still remain compliant with 3GPP SA5's specifications.

## 6.1 Allowed extensions

Vendor-specific MOCs may be supported. The vendor-specific MOCs may support new types of attributes. The 3GPP SA5-specified notifications may be issued referring to the vendor-specific MOCs and vendor-specific attributes. New MOCs shall be distinguishable from 3GPP SA5 MOCs by name. 3GPP SA5-specified and vendor-specific attributes may be used in vendor-specific MOCs. Vendor-specific attribute names shall be distinguishable from existing attribute names.

NRM MOCs may be subclassed. Subclassed MOCs shall maintain the specified behaviour of the 3GPP SA5's superior classes. They may add vendor-specific behaviour with vendor-specific attributes. When subclassing, naming attributes cannot be changed. The subclassed MOC shall support all attributes of its superior class. Vendor-specific attributes cannot be added to 3GPP SA5 NRM MOCs without subclassing.

When subclassing, the 3GPP SA5-specified containment rules and their specified cardinality shall still be followed. As an example, `ManagementNode` (or its subclasses) shall be contained under `SubNetwork` (or its subclasses). Also, in Rel-4, there may only be 0 or 1 `ManagementNode` (or its subclasses) contained under `SubNetwork` (or its subclasses).

Managed Object Instances may be instantiated as CORBA objects. This requires that the MOCs be represented in IDL. 3GPP SA5's NRM MOCs are not currently specified in IDL, but may be specified in IDL for instantiation or subclassing purposes. However, management information models should not require that IRPManagers access the instantiated managed objects other than through supported methods in the present document.

Extension rules related to notifications (Notification categories, Event Types, Extended Event Types etc.) are for further study.

## 6.2 Extensions not allowed

The IDL specifications in the present document cannot be edited or altered. Any additional IDL specifications shall be specified in separate IDL files.

IDL interfaces (note: not MOCs) specified in the present document may not be subclassed or extended. New interfaces may be defined with vendor-specific methods.

# Annex A (normative): CORBA IDL, NRM Definitions

```
#ifndef CoreNetworkResourcesNRMDefs_idl
#define CoreNetworkResourcesNRMDefs_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 MscFunction
       */
      interface MscFunction
      {
         const string CLASS = "MscFunction";

         // Attribute Names
         //
         const string mscFunctionId = "mscFunctionId";
         const string userLabel = "userLabel";
      };


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

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


      /**
       *  Definitions for MO class VlrFunction
       */
      interface VlrFunction
      {
         const string CLASS = "VlrFunction";

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

```
/**
 *  Definitions for MO class AucFunction
 */
interface AucFunction
{
   const string CLASS = "AucFunction";

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


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

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


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

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


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

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


/**
```

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

   // Attribute Names
   //
   const string sgsnFunctionId = "sgsnFunctionId";
   const string userLabel = "userLabel";
};


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

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


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

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


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

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


/**
 *  Definitions for MO class SmlcFunction
 */
```

```
interface SmlcFunction
{
   const string CLASS = "SmlcFunction";

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




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

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



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

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



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

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


/**
 *  Definitions for MO class CbcFunction
 */
```

```
interface CbcFunction
{
   const string CLASS = "CbcFunction";

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


/**
 *  Definitions for MO class CgfFunction
 */
interface CgfFunction
{
   const string CLASS = "CgfFunction";

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


/**
 *  Definitions for MO class MgwFunction
 */
interface MgwFunction
{
   const string CLASS = "MgwFunction";

   // Attribute Names
   //
   const string mgwFunctionId = "mgwFunctionId";
   const string userLabel = "userLabel";
};


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

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


/**
 *  Definitions for MO class IwfFunction
 */
interface IwfFunction
```

```
{
   const string CLASS = "IwfFunction";

   // Attribute Names
   //
   const string iwfFunctionId = "iwfFunctionId";
   const string userLabel = "userLabel";
};


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

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


/**
 *  Definitions for MO class NpdbFunction
 */
interface NpdbFunction
{
   const string CLASS = "NpdbFunction";

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


/**
 *  Definitions for MO class RSgwFunction
 */
interface RSgwFunction
{
   const string CLASS = "RSgwFunction";

   // Attribute Names
   //
   const string rSgwFunctionId = "rSgwFunctionId";
   const string userLabel = "userLabel";
};


/**
 *  Definitions for MO class SsfFunction
 */
interface SsfFunction
{
   const string CLASS = "SsfFunction";
```

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


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

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



};

#endif
```

# Annex B (informative):
# Change history

| Change history | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
| Jun 2001 | S_12 | SP-010283 | -- | -- | Approved at TSG SA #12 and placed under Change Control | 2.0.0 | 4.0.0 |
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