TSGS#25(04)0593

Source: **SA5 (Telecom Management)**

Title: **2 Rel-5/6 CR 32.653/4 Add the operationalState to the BtsSiteMgr ñ Align the CORBA/CMIP SSs with 32.652 CM; GERAN network resourcesIRP NRM**

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-1st-Level	Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Ver-Cur	Wi
SP-040593	S5-048712	32.654	010	--	Rel-6	Add the state change notification to the MOC btsSiteMgr ñ Align the CMIP SS with 32.652 CM; GERAN network resourcesIRP NRM	B	5.4.0	OAM-NIM
SP-040593	S5-048634	32.653	007	--	Rel-5	Add the operationalState to the BtsSiteMgr ñ Align the CORBA SS with 32.652 CM; GERAN network resources IRP NRM	F	5.2.0	OAM-NIM

CR-Form-v7

CHANGE REQUEST

⌘	32.654	CR	010	⌘	rev	-	⌘	Current version:	5.4.0	⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: | UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Add the state change notification to the MOC btsSiteMgr ñ Align the CMIP SS with 32.652 CM; GERAN network resourcesIRP NRM
Source:	⌘	**SA5** (olaf.pollakowski@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	20/08/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	In the IS the IOC BtsSiteMgr supports the state change notification. This CR maps this feature into the CMIP SS.
Summary of change:	⌘	Support for the state change notification is added to the MOC btsSiteMgr.
Consequences if not approved:	⌘	The CMIP SS of the Geran NRM would not be aligned with the IS.

Clauses affected:	⌘	1, 4, 5, 6, Annex A, Annex B

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

Change in Clause 1

1 Scope

The present document specifies the Common Management Information Protocol (CMIP) Solution Set (SS) for the GERAN Network Resource Integration Reference Point (IRP): Network Resource Model defined in 3GPP TS 32.652 [4]. 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.

This Solution Set specification is related to 3GPP TS 32.652 V6~~5~~.0~~3~~.X.

End of Change in Clause 1

Change in Clause 4, 5, 6, Annex A, Annex B

4 Basic aspects

4.1 Architectural Aspects

A technology independent GERAN network resource model is defined in 3GPP TS 32.652 [4] for 3G networks. This document provides an implementation of this GERAN network resource model by using CMIP technology.

4.2 Mapping

The semantic of the GERAN Network Resource Model is defined in 3GPP TS 32.652 [4]. The specification of the information object classes defined there is independent of any implementation technology and protocol.
This clause maps these technology and protocol independent definitions onto the equivalencies of the CMIP Solution Set of the GERAN Network Resource IRP.

4.2.1 Mapping of Information Object Classes

The following table maps the information object classes defined in the GERAN Network Resource Model onto the equivalent MOCs of the CMIP Solution Set.

Table 4.1: Mapping of MOCs

IS IOC	CMIP SS MOC
BssFunction	bssFunction
BtsSiteMgr	btsSiteMgrR0600
GsmCell	gsmCellR54
GsmRelation	gsmRelation
ExternalGsmCell	externalGsmCell
ExternalBssFunction	externalBssFunction

4.2.2 Mapping of Information Object Class Attributes

This clause depicts the mapping of the attributes defined in 3GPP TS 32.652 [4] on the corresponding attributes of the CMIP Solution Set.

4.2.2.1 Attribute Mapping of the IOC *BssFunction*

Table 4.2: Attribute mapping of the IOC *BssFunction*

IS Attribute	CMIP SS Attribute	Qualifier
bssFunctionId	bssFunctionId	M
userLabel	userLabel (ITU-T Rec. M.3100 [9])	M

4.2.2.2 Attribute Mapping of the IOC *BtsSiteMgr*

Table 4.3: Attribute mapping of the IOC *BtsSiteMgr*

IS Attribute	CMIP SS Attribute	Qualifier
btsSiteMgrId	btsSiteMgrId	M
userLabel	userLabel (ITU-T Rec. M.3100 [9])	M
latitude	latitude	O
longitude	longitude	O

4.2.2.3 Attribute Mapping of the IOC *GsmCell*

Table 4.4: Attribute mapping of the IOC *GsmCell*

IS Attribute	CMIP SS Attribute	Qualifier
gsmCellId	gsmCellId	M
userLabel	userLabel (ITU-T Rec. M.3100 [9])	M
cellIdentity	cellGlobalIdentity (GSM 12.20 [10])	M
lac		
mcc		
mnc		
cellAllocation	cellAllocation (GSM 12.20 [10])	M
ncc	bsIdentityCode.ncc (GSM 12.20 [10])	M
bcc	bsIdentityCode.bcc (GSM 12.20 [10])	M
rac	rac (3GPP TS 32.644 [12])	O
racc	racc	O
tsc	tsc (GSM 12.20 [10])	M
rxLevAccessMin	rxLevAccessMin (GSM 12.20 [10])	M
msTxPwrMaxCCH	msTxPwrMaxCCH (GSM 12.20 [10])	M
hoppingSequenceNumber	hoppingSequenceNumber (GSM 12.20 [10])	M
plmnPermitted	plmnPermitted	M

4.2.2.4 Attribute Mapping of the IOC *GsmRelation*

Table 4.5: Attribute mapping of the IOC *GsmRelation*

IS Attribute	CMIP SS Attribute	Qualifier
gsmRelationId	gsmRelationId	M
adjacentCell	adjacentCell (3GPP TS 32.644 [12])	M
bcchFrequency	bcchFrequency (GSM 12.20 [10])	O
ncc	bsIdentityCode.ncc (GSM 12.20 [10])	O
bcc	bsIdentityCode.bcc (GSM 12.20 [10])	O
lac	lac (3GPP TS 32.644 [12])	O

4.2.2.5 Attribute Mapping of the IOC *ExternalGsmCell*

Table 4.6: Attribute mapping of the IOC *ExternalGsmCell*

IS Attribute	CMIP SS Attribute	Qualifier
externalGsmCellId	externalGsmCellId	M
userLabel	userLabel (ITU-T Rec. M.3100 [9])	M
cellIdentity	cellGlobalIdentity (GSM 12.20 [10])	M
lac		
mcc		
mnc		
bcchFrequency	bcchFrequency (GSM 12.20 [10])	M
ncc	bsIdentityCode.ncc (GSM 12.20 [10])	M
bcc	bsIdentityCode.bcc (GSM 12.20 [10])	M
rac	rac (3GPP TS 32.644 [12])	O
racc	racc	O

4.2.2.6 Attribute Mapping of the IOC *ExternalBssFunction*

Table 4.7: Attribute mapping of the IOC *ExternalBssFunction*

IS Attribute	CMIP SS Attribute	Qualifier
externalBssFunctionId	externalBssFunctionId	M
userLabel	userLabel (ITU-T Rec. M.3100 [9])	M

4.2.3 Mapping of Name Containments

Table 4.8: Mapping of name containments

IS Name Containment	CMIP SS Name Binding
bssFunction - managedElement	bssFunction-managedElement
btsSiteMgr - bssFunction	btsSiteMgrR0600-bssFunction
gsmCell - btsSiteMgr	gsmCellR54-btsSiteMgrR0600
gsmRelation - gsmCell	gsmRelation-gsmCellR54
externalGsmCell - subNetwork	externalGsmCell-subNetwork
externalBssFunction - subNetwork	externalBssFunction-subNetwork-R0600

5 GDMO Definitions

5.1 Managed Object Classes

5.1.1 bssFunction

```
bssFunction MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 65":managedFunction;
   CHARACTERIZED BY
      bssFunctionBasicPackage,
      "3GPP TS 32.111-4 Release 5Release 6":x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 1};
```

5.1.2 btsSiteMgr

```
btsSiteMgrR0600 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 5Release 6":managedFunction;
   CHARACTERIZED BY
      btsSiteMgrBasicPackage,
      "3GPP TS 32.111-4 Release 5Release 6":x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class.",
      "Rec. M.3100: 1995":stateChangeNotificationPackage
          PRESENT IF
             "the stateChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class",
      "3GPP TS 32.674 Release 5Release 6":operationalStateAttributePackage
          PRESENT IF
             "Instances of this MOC support the operationalState attribute is supported by an
instance of this class.",
      btsSiteMgrGeoPositionPackage
          PRESENT IF
             "the attributes defined in this package are supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 20600};
```

5.1.3 gsmCell

```
gsmCellR54 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 6":managedFunction;
CHARACTERIZED BY
      gsmCellBasicPackage,
      gsmCellMandatoryPackageR54,
      "3GPP TS 32.111-4 Release 6":x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
```

```
            "the attributeValueChange notification defined in ITU-T Rec. X.721
             is supported by an instance of this class.",
      gsmCellOptionalPackage
          PRESENT IF
            "the attributes defined in this package are supported by an instance
             of this class.";
REGISTERED AS {ts32-654ObjectClass 7};

gsmCell MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 5": managedFunction;
CHARACTERIZED BY
      gsmCellBasicPackage,
      gsmCellMandatoryPackage,
      "3GPP TS 32.111-4 Release 5": x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
            "the objectCreation and the objectDeletion notifications defined in
             ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
            "the attributeValueChange notification defined in ITU-T Rec. X.721
             is supported by an instance of this class.",
      gsmCellOptionalPackage PRESENT IF
      "the attributes defined in this package are supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 3};
```

5.1.4 externalGsmCell

```
externalGsmCell MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 5Release 6": managedFunction;
   CHARACTERIZED BY
      externalGsmCellBasicPackage,
      externalGsmCellMandatoryPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class.",
     gsmCellOptionalPackage
          PRESENT IF
             "the attributes defined in this package are supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 4};
```

5.1.5 gsmRelation

```
gsmRelation MANAGED OBJECT CLASS
   DERIVED FROM
      "Rec. X.721 | ISO/IEC 10165-2 : 1992Recommendation X.721: 1992":top;
   CHARACTERIZED BY
      gsmRelationBasicPackage;
   CONDITIONAL PACKAGES
      gsmRelationOptionalPackage
          PRESENT IF
             "the attributes defined in this package are supported by an instance of this class.",
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              are supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 5};
```

5.1.6 externalBssFunction

```
externalBssFunction MANAGED OBJECT CLASS
```

```
   DERIVED FROM
      "3GPP TS 32.624 Release 5Release 6": managedFunction;
   CHARACTERIZED BY
      externalBssFunctionBasicPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 6};
```

5.1.7 gsmCellR54

```
gsmCellR54 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624 Release 5": managedFunction;
CHARACTERIZED BY
      gsmCellBasicPackage,
      gsmCellMandatoryPackageR54,
      "3GPP TS 32.111-4 Release 5": x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      "Rec. M.3100: 1995":createDeleteNotificationsPackage
          PRESENT IF
             "the objectCreation and the objectDeletion notifications defined in
              ITU-T Rec. X.721 are supported by an instance of this class.",
      "Rec. M.3100: 1995":attributeValueChangeNotificationPackage
          PRESENT IF
             "the attributeValueChange notification defined in ITU-T Rec. X.721
              is supported by an instance of this class.",
      gsmCellOptionalPackage PRESENT IF
      "the attributes defined in this package are supported by an instance of this class.";
REGISTERED AS {ts32-654ObjectClass 7};
```

5.2 Packages

5.2.1 bssFunctionBasicPackage

```
bssFunctionBasicPackage PACKAGE
   BEHAVIOUR
      bssFunctionBasicPackageBehaviour;
   ATTRIBUTES
      bssFunctionId   GET;
REGISTERED AS {ts32-654Package 1};

bssFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "The Managed Object Class bssFunction represents BSS functionality.";
```

5.2.2 btsSiteMgrBasicPackage

```
btsSiteMgrBasicPackage PACKAGE
   BEHAVIOUR
      btsSiteMgrBasicPackageBehaviour;
   ATTRIBUTES
      btsSiteMgrId   GET;
REGISTERED AS {ts32-654Package 2};

btsSiteMgrBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "The 'BtsSiteMgr' managed object contains site specific information for a BTS site.";
```

5.2.3 btsSiteMgrGeoPositionPackage

```
btsSiteMgrGeoPositionPackage PACKAGE
   BEHAVIOUR
      btsSiteMgrGeoPositionPackageBehaviour;
   ATTRIBUTES
```

```
      longitude   GET-REPLACE,
      latitude    GET-REPLACE;
REGISTERED AS {ts32-654Package 3};

btsSiteMgrGeoPositionPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes describing the geographic position of a BTS site.";
```

5.2.4 gsmCellBasicPackage

```
gsmCellBasicPackage PACKAGE
   BEHAVIOUR
      gsmCellBasicPackageBehaviour;
   ATTRIBUTES
      gsmCellId   GET;
REGISTERED AS {ts32-654Package 4};

gsmCellBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "The managed object class gsmCell represents the GSM radio cell.";
```

5.2.5 gsmCellMandatoryPackage

```
gsmCellMandatoryPackageR54 PACKAGE
   BEHAVIOUR
      gsmCellMandatoryPackageR54Behaviour;
   ATTRIBUTES
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":cellAllocation          GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":bsIdentityCode          GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":cellGlobalIdentity      GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":tsc                     GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":rxLevAccessMin          GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":msTxPwrMaxCCH           GET-REPLACE,
      "ETS 300 622: June 1996 (GSM 12.20 version 4.2.1)":hoppingSequenceNumber   GET-REPLACE,
      plmnPermitted                                                              GET-REPLACE;
REGISTERED AS {ts32-654Package 12};

gsmCellMandatoryPackageR54Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the elementary mandatory attributes of a gsmCell.";

~~gsmCellMandatoryPackage PACKAGE~~
~~   BEHAVIOUR~~
~~      gsmCellMandatoryPackageBehaviour;~~
~~   ATTRIBUTES~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": cellAllocation          GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": bsIdentityCode          GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": cellGlobalIdentity      GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": tsc                     GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": rxLevAccessMin          GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": msTxPwrMaxCCH           GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": hoppingSequenceNumber   GET-REPLACE,~~
~~      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": plmnPermitted           GET-REPLACE;~~
~~REGISTERED AS {ts32-654Package 5};~~

~~gsmCellMandatoryPackageBehaviour BEHAVIOUR~~
~~DEFINED AS~~
~~   "This package contains the elementary mandatory attributes of a gsmCell.";~~
```

5.2.6 gsmCellOptionalPackage

```
gsmCellOptionalPackage PACKAGE
   BEHAVIOUR
      gsmCellOptionalPackageBehaviour;
   ATTRIBUTES
      "3GPP TS 32.644 ~~Release 5~~Release 6":rac   GET-REPLACE,
      racc                                GET-REPLACE;
REGISTERED AS {ts32-654Package 6};

gsmCellOptionalPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the optional GPRS attributes of a gsmCell.";
```

5.2.7 externalGsmCellBasicPackage

```
externalGsmCellBasicPackage PACKAGE
   BEHAVIOUR
      externalGsmCellBasicPackageBehaviour;
   ATTRIBUTES
      externalGsmCellId   GET;
REGISTERED AS {ts32-654Package 7};

externalGsmCellBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "This Managed Object Class represents a radio cell controlled by another IRPAgent. It is
    a necessary attribute for inter-system handover. This MOC is a subreplication of a
    MOC in another NEM.";
```

5.2.8 externalGsmCellMandatoryPackage

```
externalGsmCellMandatoryPackage PACKAGE
   BEHAVIOUR
      externalGsmCellMandatoryPackageBehaviour;
   ATTRIBUTES
      "ETS 300 622: JuneUNE 1996 (GSM 12.20 versionVERSION 4.2.1)": bsIdentityCode       GET-
REPLACE,
      "ETS 300 622: JuneUNE 1996 (GSM 12.20 versionVERSION 4.2.1)": cellGlobalIdentity   GET-
REPLACE,
      "ETS 300 622: JuneUNE 1996 (GSM 12.20 versionVERSION 4.2.1)": bcchFrequency        GET-
REPLACE;
REGISTERED AS {ts32-654Package 8};

externalGsmCellMandatoryPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the elementary mandatory attributes of a externalGsmCell.";
```

5.2.9 gsmRelationBasicPackage

```
gsmRelationBasicPackage PACKAGE
   BEHAVIOUR
      gsmRelationBasicPackageBehaviour;
   ATTRIBUTES
      gsmRelationId                              GET,
     "3GPP TS 32.644 Release 5Release 6": adjacentCell   GET-REPLACE;
REGISTERED AS {ts32-654Package 9};

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

5.2.10 gsmRelationOptionalPackage

```
gsmRelationOptionalPackage PACKAGE
   BEHAVIOUR
      gsmRelationOptionalPackageBehaviour;
   ATTRIBUTES
      "ETS 300 622: JuneUNE 1996 (GSM 12.20 versionVERSION 4.2.1)": bsIdentityCode  GET-REPLACE,
      "3GPP TS 32.644 Release 5Release 6": lac                                GET-REPLACE,
      "ETS 300 622: JuneUNE 1996 (GSM 12.20 versionVERSION 4.2.1)": bcchFrequency   GET-REPLACE;
REGISTERED AS {ts32-654Package 10};

gsmRelationOptionalPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the optional attributes of a gsmRelation.";
```

5.2.11 ExternalBssFunctionBasicPackage

```
externalBssFunctionBasicPackage PACKAGE
   BEHAVIOUR
      externalBssFunctionBasicPackageBehaviour;
   ATTRIBUTES
```

```
      externalBssFunctionId   GET;
REGISTERED AS {ts32-654Package 11};

externalBssFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "The Managed Object Class externalBssFunction represents external BSS functionality.";
```

5.2.12 gsmCellMandatoryPackageR54

```
gsmCellMandatoryPackageR54 PACKAGE
   BEHAVIOUR
      gsmCellMandatoryPackageR54Behaviour;
   ATTRIBUTES
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": cellAllocation          GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": bsIdentityCode          GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": cellGlobalIdentity      GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": tsc                     GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": rxLevAccessMin          GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": msTxPwrMaxCCH           GET-REPLACE,
      "ETS 300 622: JUNE 1996 (GSM 12.20 VERSION 4.2.1)": hoppingSequenceNumber   GET-REPLACE,
      plmnPermitted                                                               GET-REPLACE;
REGISTERED AS {ts32-654Package 12};

gsmCellMandatoryPackageR54Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the elementary mandatory attributes of a gsmCell.";
```

5.3 Attributes

5.3.1 bssFunctionId

```
bssFunctionId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      bssFunctionIdBehaviour;
REGISTERED AS {ts32-654Attribute 1};

bssFunctionIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies a bssFunction object.";
```

5.3.2 btsSiteMgrId

```
btsSiteMgrId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      btsSiteMgrIdBehaviour;
REGISTERED AS {ts32-654Attribute 2};

btsSiteMgrIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies a btsSiteMgr object.";
```

5.3.3 longitude

```
longitude ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.Longitude;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      longitudeBehaviour;
REGISTERED AS {ts32-654Attribute 3};

longitudeBehaviour BEHAVIOUR
```

```
DEFINED AS
   "Used for geographical positioning of the sitemanager.";
```

5.3.4 latitude

```
latitude ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.Latitude;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      latitudeBehaviour;
REGISTERED AS {ts32-654Attribute 4};

latitudeBehaviour BEHAVIOUR
DEFINED AS
   "Used for geographical positioning of the sitemanager.";
```

5.3.5 gsmCellId

```
gsmCellId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      gsmCellIdBehaviour;
REGISTERED AS {ts32-654Attribute 5};

gsmCellIdBehaviour BEHAVIOUR
DEFINED AS
   "Cell Identity (Ref GSM 03.03).";
```

5.3.6 racc

```
racc ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.Racc;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      raccBehaviour;
REGISTERED AS {ts32-654Attribute 7};

raccBehaviour BEHAVIOUR
DEFINED AS
   "Routing Area Colour Code, RACC.";
```

5.3.7 gsmRelationId

```
gsmRelationId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      gsmRelationIdBehaviour;
REGISTERED AS {ts32-654Attribute 8};

gsmRelationIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies a gsmRelation object.";
```

5.3.8 externalGsmCellId

```
externalGsmCellId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      externalGsmCellIdBehaviour;
```

```
REGISTERED AS {ts32-654Attribute 9};

externalGsmCellIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies a externalGsmCell object.";
```

5.3.9 externalBssFunctionId

```
externalBssFunctionId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      externalBssFunctionIdBehaviour;
REGISTERED AS {ts32-654Attribute 10};

externalBssFunctionIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies an externalBssFunction object.";
```

5.3.10 plmnPermitted

```
plmnPermitted ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-654TypeModule.PlmnPermitted;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      plmnPermittedBehaviour;
REGISTERED AS {ts32-654Attribute 11};

plmnPermittedBehaviour BEHAVIOUR
DEFINED AS
   "Network Color Code permitted as defined by the NCC_PERMITTED parameter
    specified in 3GPP TS 45.008";
```

5.4 Name Binding

5.4.1 bssFunction - managedElement

```
bssFunction-managedElement NAME BINDING
   SUBORDINATE OBJECT CLASS
      bssFunction;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624 Release 5Release 6": managedElement;
   WITH ATTRIBUTE
      bssFunctionId;
   BEHAVIOUR
      bssFunction-managedElementBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 1};

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

5.4.2 btsSiteMgr - bssFunction

```
btsSiteMgrR0600-bssFunction NAME BINDING
   SUBORDINATE OBJECT CLASS
      btsSiteMgrR0600;
   NAMED BY SUPERIOR OBJECT CLASS
      bssFunction;
   WITH ATTRIBUTE
      btsSiteMgrId;
```

```
    BEHAVIOUR
        btsSiteMgrR0600-bssFunctionBehaviour;
    CREATE
        WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE
        ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 20600};

btsSiteMgrR0600-bssFunctionBehaviour BEHAVIOUR
DEFINED AS
    "The name binding represents a relationship in which a bssFunction contains
     and controls a btsSiteMgr. When automatic instance naming is used, the choice
     of name bindings is left as a local matter.";

btsSiteMgr-bssFunction NAME BINDING
    SUBORDINATE OBJECT CLASS
        btsSiteMgr;
    NAMED BY SUPERIOR OBJECT CLASS
        bssFunction;
    WITH ATTRIBUTE
        btsSiteMgrId;
    BEHAVIOUR
        btsSiteMgr-bssFunctionBehaviour;
    CREATE
        WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE
        ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 2};

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

5.4.3 gsmCell - btsSiteMgr

```
gsmCellR54-btsSiteMgrR0600 NAME BINDING
    SUBORDINATE OBJECT CLASS
        gsmCellR54;
    NAMED BY SUPERIOR OBJECT CLASS
        btsSiteMgrR0600;
    WITH ATTRIBUTE
        gsmCellId;
    BEHAVIOUR
        gsmCellR54-btsSiteMgrBehaviourR0600;
    CREATE
        WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE
        ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 70600};

gsmCellR54-btsSiteMgrBehaviourR0600 BEHAVIOUR
DEFINED AS
    "The name binding represents a relationship in which a btsSiteMgr contains
     and controls a gsmCellR54. When automatic instance naming is used, the choice
     of name bindings is left as a local matter.";

gsmCell-btsSiteMgr NAME BINDING
    SUBORDINATE OBJECT CLASS
        gsmCell;
    NAMED BY SUPERIOR OBJECT CLASS
        btsSiteMgr;
    WITH ATTRIBUTE
        gsmCellId;
    BEHAVIOUR
        gsmCell-btsSiteMgrBehaviour;
    CREATE
        WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE
        ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 3};

gsmCell-btsSiteMgrBehaviour BEHAVIOUR
DEFINED AS
    "The name binding represents a relationship in which a btsSiteMgr contains
     and controls a gsmCell. When automatic instance naming is used, the choice
```

~~of name bindings is left as a local matter.";~~

5.4.4 gsmRelation - gsmCell

```
gsmRelation-gsmCellR54 NAME BINDING
   SUBORDINATE OBJECT CLASS
      gsmRelation;
   NAMED BY SUPERIOR OBJECT CLASS
      gsmCellR54;
   WITH ATTRIBUTE
      gsmRelationId;
   BEHAVIOUR
      gsmRelation-gsmCellR54Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 8};

gsmRelation-gsmCellR54Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a gsmCellR54 contains
    and controls a gsmRelation. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";

~~gsmRelation-gsmCell NAME BINDING~~
~~   SUBORDINATE OBJECT CLASS~~
~~      gsmRelation;~~
~~   NAMED BY SUPERIOR OBJECT CLASS~~
~~      gsmCell;~~
~~   WITH ATTRIBUTE~~
~~      gsmRelationId;~~
~~   BEHAVIOUR~~
~~      gsmRelation-gsmCellBehaviour;~~
~~   CREATE~~
~~      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;~~
~~   DELETE~~
~~      ONLY-IF-NO-CONTAINED-OBJECTS;~~
~~REGISTERED AS {ts32-654NameBinding 4};~~

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

5.4.5 externalGsmCell - subNetwork

```
externalGsmCell-subNetwork NAME BINDING
   SUBORDINATE OBJECT CLASS
      externalGsmCell;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624 ~~Release 5~~Release 6":~~ ~~subNetwork;
   WITH ATTRIBUTE
      externalGsmCellId;
   BEHAVIOUR
      externalGsmCell-subNetworkBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 5};

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

5.4.6 vsDataContainer - bssFunction

Void.

5.4.7 vsDataContainer - btsSiteMgr

Void.

5.4.8 vsDataContainer - gsmCell

Void.

5.4.9 vsDataContainer - gsmRelation

Void.

5.4.106 externalBssFunction - subNetwork

```
externalBssFunction-subNetwork-R0600 NAME BINDING
   SUBORDINATE OBJECT CLASS
      externalBssFunction;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624 Release 5Release 6":subNetwork;
   WITH ATTRIBUTE
      externalBssFunctionId;
   BEHAVIOUR
      externalBssFunction-subNetworkBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 106};

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

5.4.7 gsmCellR54 - btsSiteMgr

```
gsmCellR54-btsSiteMgr NAME BINDING
   SUBORDINATE OBJECT CLASS
      gsmCellR54;
   NAMED BY SUPERIOR OBJECT CLASS
      btsSiteMgr;
   WITH ATTRIBUTE
      gsmCellId;
   BEHAVIOUR
      gsmCellR54-btsSiteMgrBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 7};

gsmCellR54-btsSiteMgrBehaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a btsSiteMgr contains
    and controls a gsmCellR54. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

5.4.8 gsmRelation - gsmCellR54

```
gsmRelation-gsmCellR54 NAME BINDING
   SUBORDINATE OBJECT CLASS
      gsmRelation;
   NAMED BY SUPERIOR OBJECT CLASS
      gsmCellR54;
   WITH ATTRIBUTE
      gsmRelationId;
   BEHAVIOUR
```

```
        gsmRelation-gsmCellR54Behaviour;
    CREATE
        WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE
        ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-654NameBinding 8};

gsmRelation-gsmCellR54Behaviour BEHAVIOUR
DEFINED AS
    "The name binding represents a relationship in which a gsmCellR54 contains
    and controls a gsmRelation. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

Annex A (informative): List of assigned Object Identifiers

This annex provides a list with all Object Identifiers (OIDs) that have been assigned in TS 32.654 in Release 5 up to V5.5.0 and in Release 6 up to the latest version. These OIDs should not be assigned to new objects.

Basic Object Name	Name and OID of the current TS Version	Name and OIDs of previous TS Versions
Managed Object Classes		
bssFunction	Name: bssFunction OID : ts32-654ObjectClass 1	--
btsSiteMgr	Name: btsSiteMgrR0600 OID : ts32-654ObjectClass 20600	Name: btsSiteMgr OID : ts32-654ObjectClass 2
gsmCell	Name: gsmCellR54 OID : ts32-654ObjectClass 7	Name: gsmCell OID : ts32-654ObjectClass 3
Packages		
bssFunctionBasicPackage	Name: bssFunctionBasicPackage OID : ts32-654Package 1	--
btsSiteMgrBasicPackage	Name: btsSiteMgrBasicPackage OID : ts32-654Package 2	--
btsSiteMgrGeoPositionPackage	Name: btsSiteMgrGeoPositionPackage OID : ts32-654Package 3	--
gsmCellBasicPackage	Name: gsmCellBasicPackage OID : ts32-654Package 4	--
gsmCellMandatoryPackage	Name: gsmCellMandatoryPackageR54 OID : ts32-654Package 12	Name: gsmCellMandatoryPackage OID : ts32-654Package 5
gsmCellOptionalPackage	Name: gsmCellOptionalPackage OID : ts32-654Package 6	--
externalGsmCellBasicPackage	Name: externalGsmCellBasicPackage OID : ts32-654Package 7	--
externalGsmCellMandatoryPackage	Name: externalGsmCellMandatoryPackage OID : ts32-654Package 8	--
gsmRelationBasicPackage	Name: gsmRelationBasicPackage OID : ts32-654Package 9	--
gsmRelationOptionalPackage	Name: gsmRelationOptionalPackage OID : ts32-654Package 10	--
externalBssFunctionBasicPackage	Name: externalBssFunctionBasicPackage OID : ts32-654Package 11	--
Actions		
Notifications		
Attributes		
bssFunctionId	Name: bssFunctionId OID : ts32-654Attribute 1	--
btsSiteMgrId	Name: btsSiteMgrId OID : ts32-654Attribute 2	--
longitude	Name: longitude OID : ts32-654Attribute 3	--
latitude	Name: latitude OID : ts32-654Attribute 4	--
gsmCellId	Name: gsmCellId OID : ts32-654Attribute 5	--
racc	Name: racc OID : ts32-654Attribute 7	--
gsmRelationId	Name: gsmRelationId OID : ts32-654Attribute 8	--
externalGsmCellId	Name: externalGsmCellId OID : ts32-654Attribute 9	--
externalBssFunctionId	Name: externalBssFunctionId OID : ts32-654Attribute 10	--

plmnPermitted	Name: plmnPermitted OID : ts32-654Attribute 11	--
Parameters		
Name Bindings		
bssFunction-managedElement	Name: bssFunction-managedElement OID : ts32-654NameBinding 1	--
btsSiteMgr-bssFunction	Name: btsSiteMgrR0600-bssFunction OID : ts32-654NameBinding 20600	Name: btsSiteMgr-bssFunction OID : ts32-654NameBinding 2
gsmCell-btsSiteMgr	Name: gsmCellR54-btsSiteMgrR0600 OID : ts32-654NameBinding 70600	Name: gsmCellR54-btsSiteMgr OID : ts32-654NameBinding 7 Name: gsmCell-btsSiteMgr OID : ts32-654NameBinding 3
gsmRelation-gsmCell	Name: gsmRelation-gsmCellR54 OID : ts32-654NameBinding 8	Name: gsmRelation-gsmCell OID : ts32-654NameBinding 4
externalGsmCell-subNetwork	Name: externalGsmCell-subNetwork OID : ts32-654NameBinding 5	--
vsDataContainer-bssFunction	--	Name: vsDataContainer-bssFunction OID : ts32-654NameBinding 6
vsDataContainer-btsSiteMgr	--	Name: vsDataContainer-btsSiteMgr OID : ts32-654NameBinding 7
vsDataContainer-gsmCell	--	Name: vsDataContainer-gsmCell OID : ts32-654NameBinding 9
vsDataContainer-gsmRelation	--	Name: vsDataContainer-gsmRelation OID : ts32-654NameBinding 9
externalBssFunction-subNetwork	Name: externalBssFunction-subNetwork-R0600 OID : ts32-654NameBinding 10	Name: externalBssFunction-subNetwork OID : ts32-654NameBinding 6

Annex BA (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 2001	S_13	SP-010477	002	--	Addition of mcc and mnc in the object model of GERAN	4.0.0	4.1.0
Dec 2002	S_18	SP-020749	003	--	Alignment of the CMIP SS with the Rel-5 version of the IS in 32.652	4.1.0	5.0.0
Jun 2003	S_20	SP-030283	005	--	Removal of relationType	5.0.0	5.1.0
Jun 2003	S_20	SP-030286	006	--	Alignment of object class names to externalGsmCell - Alignment with 32.624	5.0.0	5.1.0
Sep 2003	S_21	SP-030418	007	--	Inclusion of ExternalBssFunction - Alignment with 32.652	5.1.0	5.2.0
Dec 2003	S_22	SP-030642	008	--	Add notifications to functional objects - Align with 32.652 (IS)	5.2.0	5.3.0
Jun 2004	S_24	SP-040257	009	--	Correction of the type of the plmnPermittd attribute	5.3.0	5.4.0

End of Change in Clause 4, 5, 6, Annex A, Annex B

CR-Form-v7

CHANGE REQUEST

⌘	32.653	CR	007	⌘	rev	-	⌘	Current version:	5.2.0	⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: | UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Add the operationalState to the BtsSiteMgr ñ Align the CORBA SS with 32.652 CM; GERAN network resources IRP NRM
Source:	⌘	**SA5** (olaf.pollakowski@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	20/08/2004
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The attributes of BtsSiteMgr in the IS includes the operationalState. This attribute is not mapped in the CORBA SS.
Summary of change:	⌘	The IS attribute operationalState is mapped into the CORBA SS.
Consequences if not approved:	⌘	The CORBA SS of the Geran NRM IRP would not be consistent with the IS.

Clauses affected:	⌘	5.2.2, Annex A

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

Other comments:	⌘	

Change in Clause 5.2.2

5.2.2 IOC BtsSiteMgr

Table 5.2: Mapping from NRM IOC BtsSiteMgr attributes to SS equivalent MOC BtsSiteMgr attributes

NRM Attributes of IOC BtsSiteMgr in TS 32.652 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
btsSiteMgrId	btsSiteMgrId	string	M	M	-
userLabel	userLabel	string	M	M	M
latitude	latitude	long	O	M	M
longitude	longitude	long	O	M	M
operationalState	operationalState	StateManagementIRPOptConstDefs::OperationalStateTypeOpt	O	M	-

End of Change in Clause 5.2.2

Change in Clause Annex A

Annex A (normative): CORBA IDL, NRM Definitions

```
#ifndef GeranNetworkResourcesNRMDefs_idl
#define GeranNetworkResourcesNRMDefs_idl

#pragma prefix "3gppsa5.org"

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


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

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


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

```
        // Attribute Names
        //
        const string btsSiteMgrId = "btsSiteMgrId";
        const string userLabel = "userLabel";
        const string latitude = "latitude";
        const string longitude = "longitude";
        const string operationalState = "operationalState";

};


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

        // Attribute Names
        //
        const string gsmCellId = "gsmCellId";
        const string userLabel = "userLabel";
        const string cellIdentity = "cellIdentity";
        const string cellAllocation = "cellAllocation";
        const string ncc = "ncc";
        const string bcc = "bcc";
        const string lac = "lac";
        const string mcc = "mcc";
        const string mnc = "mnc";
        const string rac = "rac";
        const string racc = "racc";
        const string tsc = "tsc";
        const string rxLevAccessMin = "rxLevAccessMin";
        const string msTxPwrMaxCCH = "msTxPwrMaxCCH";
        const string hoppingSequenceNumber = "hoppingSequenceNumber";
        const string plmnPermitted = "plmnPermitted";

};


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

        // Attribute Names
        //
        const string gsmRelationId = "gsmRelationId";
        const string adjacentCell = "adjacentCell";
        const string bcchFrequency = "bcchFrequency";
        const string ncc = "ncc";
        const string bcc = "bcc";
        const string lac = "lac";

};


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

```
        // Attribute Names
        //
        const string externalGsmCellId = "externalGsmCellId";
        const string userLabel = "userLabel";
        const string cellIdentity = "cellIdentity";
        const string bcchFrequency = "bcchFrequency";
        const string ncc = "ncc";
        const string bcc = "bcc";
        const string lac = "lac";
        const string mcc = "mcc";
        const string mnc = "mnc";
        const string rac = "rac";
        const string racc = "racc";


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

        // Attribute Names
        //
        const string externalBssFunctionId = "externalBssFunctionId";
        const string userLabel = "userLabel";

};

};

#endif
```

End of Change in Clause Annex A

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
Dec 2001	S_14	SP-010651	001	--	Addition of MCC and MNC in the object model	4.0.0	4.1.0
Dec 2001	S_14	SP-010646	002	--	Change type "integer" to "long" in the GERAN Network Resources IRP: CORBA SS	4.0.0	4.1.0
Sep 2002	S_17	SP-020497	003	--	Upgrade to Rel-5	4.1.0	5.0.0
Dec 2002	--	--	--	--	Cosmetics	5.0.0	5.0.1
Jun 2003	S_20	SP-030283	005	--	Deletion of GERAN attribute relationType from CORBA SS	5.0.1	5.1.0
Sep 2003	S_21	SP-030418	006	--	Inclusion of External BSS Function in GERAN CORBA solution set - Alignment with 32.652	5.1.0	5.2.0