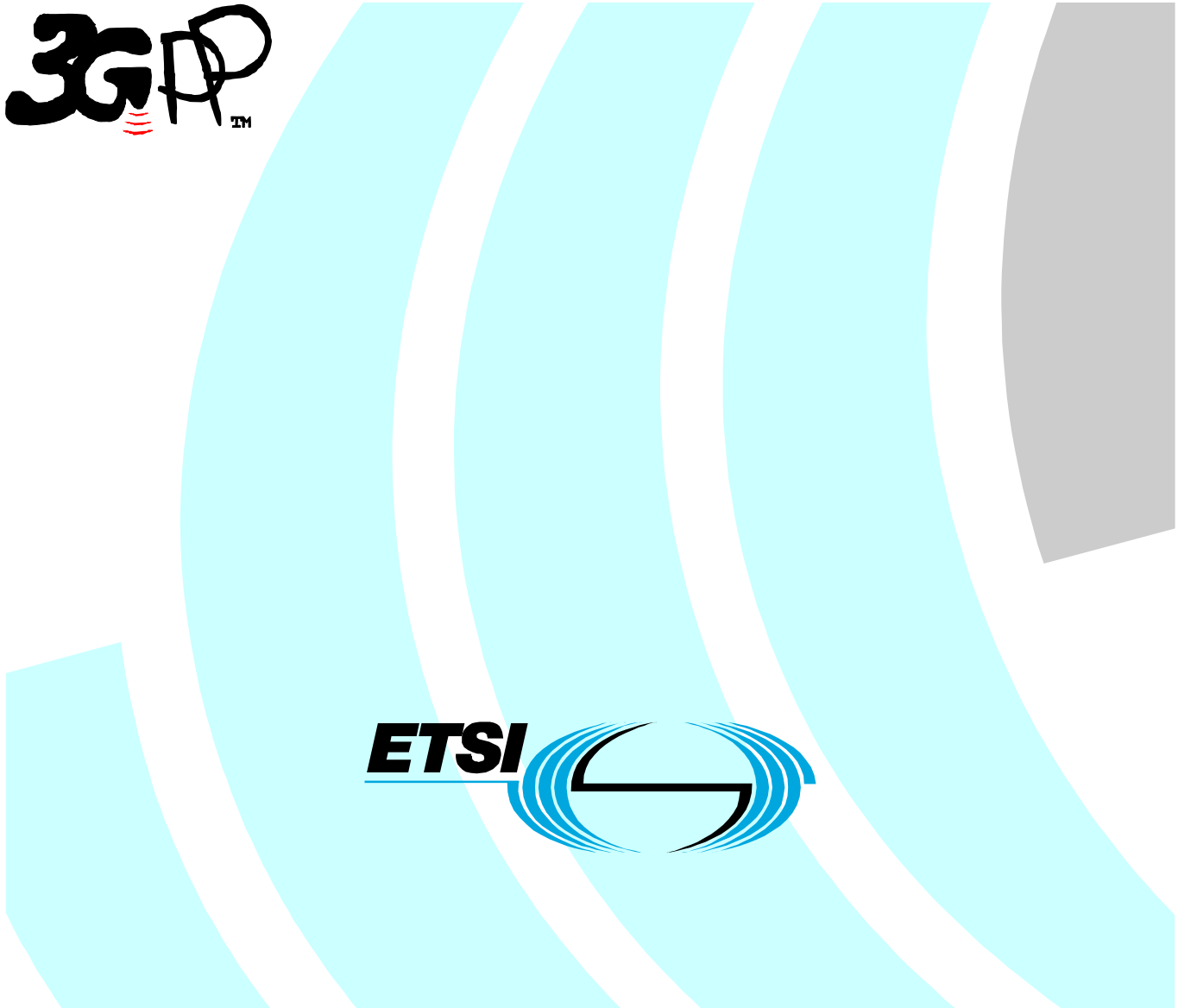
# ETSI TS 132 644 V6.3.0 (2006-09)

*Technical Specification*

**Universal Mobile Telecommunications System (UMTS);**
**Telecommunication management;**
**Configuration Management (CM);**
**UTRAN network resources Integration Reference Point (IRP):**
**Common Management Information Protocol (CMIP)**
**Solution Set (SS)**
**(3GPP TS 32.644 version 6.3.0 Release 6)**



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# Foreword

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# Contents

# Foreword

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

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# Introduction

The present document is part of a TS-family covering the 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

32.641: "Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Requirements".

32.642: "Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Network Resource Model (NRM)".

32.643: "Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)".

**32.644: "Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Common Management Information Protocol (CMIP) Solution Set (SS)".**

32.645: "Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition

The interface Itf-N, defined in 3GPP TS 32.102 [2], is built up by a number of Integration Reference Points (IRPs) and a related Name Convention, which realise the functional capabilities over this interface. The basic structure of the IRPs is defined in 3GPP TS 32.101 [1] and 3GPP TS 32.102 [2].

# 1 Scope

The present document specifies the Common Management Information Protocol (CMIP) Solution Set (SS) for the UTRAN Network Resource Integration Reference Point (IRP): Network Resource Model defined in 3GPP TS 32.642 [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 32.642 V6.4.X.

# 2 References

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

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

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

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

[3] 3GPP TS 32.304: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Common Management Information Protocol (CMIP) Solution Set (SS)".

[4] 3GPP TS 32.642: "Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Network Resource Model (NRM)".

[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".

[10] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".

# 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 [10] and 3GPP TS 32.642 [4] 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 |
| Mcps | Mega-chips per second |
| 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 | Universal Terrestrial Radio Access Network |

# 4 Basic aspects

## 4.1 Architectural aspects

A technology independent UTRAN network resource model is defined in 3GPP TS 32.642 [4] for 3G networks. This document provides an implementation of this UTRAN network resource model by using CMIP technology.

## 4.2 Mapping

The semantic of the UTRAN Network Resource Model is defined in 3GPP TS 32.642 [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 UTRAN Network Resource IRP.

### 4.2.1 Mapping of Information Object Classes

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

**Table : Mapping of IOCs**

| IS IOC | CMIP SS MOC |
|---|---|
| RncFunction | rncFunctionR55 |
| NodeBFunction | nodeBFunction |
| UtranCell | utranCellR0630 |
| IubLink | iubLinkR0600 |
| UtranRelation | utranRelationR0630 |
| ExternalUtranCell | externalUtranCellR0630 |
| AntennaFunction | antennaFunctionR0630 |
| ExternalRncFunction | externalRncFunction |

### 4.2.2 Mapping of Information Object Class Attributes

This clause depicts the mapping of the attributes defined in 3GPP TS 32.642 [4] on the corresponding attributes of the CMIP Solution Set.

#### 4.2.2.1 Attribute Mapping of the IOC *RncFunction*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| rncFunctionId | rncFunctionId | M | M | -- |
| userLabel | userLabel (ITU-T Rec. M.3100 [9]) | M | M | M |
| mcc | mcc | M | M | M |
| mnc | mnc | M | M | M |
| rncId | rncIdR55 | M | M | M |

#### 4.2.2.2 Attribute Mapping of the IOC *NodeBFunction*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| nodeBFunctionId | nodeBFunctionId | M | M | -- |
| userLabel | userLabel (ITU-T Rec. M.3100 [9]) | M | M | M |
| nodeBFunction-IubLink | NodeBFunction2iubLink | M | M | -- |

#### 4.2.2.3 Attribute Mapping of the IOC *UtranCell*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| utranCellId | utranCellId | M | M | -- |
| userLabel | userLabel (ITU-T Rec. M.3100 [9]) | M | M | M |
| cId | cIdR55 | M | M | M |
| localCellId | localCellIdR55 | M | M | M |
| uarfcnDl | uarfcnDlR630 | O | M | M |
| uarfcnUl | uarfcnUlR630 | O | M | M |
| primaryScramblingCode | primaryScramblingCodeR630 | O | M | M |
| primaryCpichPower | primaryCpichPowerR630 | O | M | M |
| retAntennaFunctionList | retAntennaFunctionListR0610 | O | M | M |
| maximumTransmissionPower | maximumTransmissionPowerR630 | M | M | M |
| primarySchPower | primarySchPowerR630 | O | M | M |
| secondarySchPower | secondarySchPowerR630 | O | M | M |
| bchPower | bchPowerR630 | O | M | M |
| cellMode | cellMode | M | M | -- |
| uarfcn | uarfcnR630 | O | M | M |
| cellParameterId | cellParameterId | O | M | M |
| primaryCcpchPower | primaryCcpchPower | O | M | M |
| dwPchPower | dwPchPower | O | M | M |
| timeSlotList | timeSlotList | O | M | M |
| schPower | schPower | O | M | M |
| lac | lacR630 | M | M | M |
| rac | racR630 | M | M | M |
| sac | sacR630 | M | M | M |
| uraList | uraListR630 | M | M | M |
| utranCell-IubLink | utranCell2iubLink | M | M | M |
| operationalState | operationalState | O | M | -- |

#### 4.2.2.4 Attribute Mapping of the IOC *IubLink*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| iubLinkId | iubLinkId | M | M | -- |
| userLabel | userLabel (ITU-T Rec. M.3100 [9]) | M | M | M |
| iubLink-UtranCell | iubLink2utranCell | M | M | M |
| iubLink-NodeBFunction | iubLink2nodeBFunction | M | M | -- |
| iubLink-aTMChannelTerminationPoint | iubLink2aTMChannelTerminationPoint | M | M | -- |

#### 4.2.2.5 Attribute Mapping of the IOC *UtranRelation*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| utranRelationId | utranRelationId | M | M | -- |
| cellMode | cellMode | M | M | M |
| adjacentCell | adjacentCell | M | M | -- |
| uarfcnUl | uarfcnUlR630 | O | M | -- |
| uarfcnDl | uarfcnDlR630 | O | M | -- |
| primaryScramblingCode | primaryScramblingCodeR630 | O | M | -- |
| primaryCpichPower | primaryCpichPowerR630 | O | M | -- |
| lac | lacR630 | O | M | -- |
| uarfcn | uarfcnR630 | O | M | -- |
| cellParameterId | cellParameterId | O | M | -- |
| primaryCcpchPower | primaryCcpchPower | O | M | -- |

### 4.2.2.6 Attribute Mapping of the IOC *ExternalUtranCell*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| externalUtranCellId | externalUtranCellIdR630 | M | M | -- |
| userLabel | userLabel | M | M | M |
| cId | cIdR55 | M | M | M |
| mcc | mcc | M | M | M |
| mnc | mnc | M | M | M |
| rncId | rncIdR55 | M | M | M |
| cellMode | cellMode | M | M | -- |
| uarfcnUl | uarfcnUlR630 | O | M | M |
| uarfcnDl | uarfcnDlR630 | O | M | M |
| primaryScramblingCode | primaryScramblingCodeR630 | O | M | M |
| primaryCpichPower | primaryCpichPowerR630 | O | M | M |
| uarfcn | uarfcnR630 | O | M | M |
| cellParameterId | cellParameterId | O | M | M |
| primaryCcpchPower | primaryCcpchPower | O | M | M |
| lac | lacR630 | M | M | M |
| rac | racR630 | M | M | M |
| controllingRnc | controllingRnc | O | M | -- |

### 4.2.2.7 Attribute Mapping of the IOC *AntennaFunction*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| antennaFunctionId | antennaFunctionIdR0610 | O | M | -- |
| userLabel | userLabel (ITU-T Rec. M.3100 [9]) | O | M | M |
| retUtranCellList | retUtranCellListR0610 | O | M | M |
| retTiltValue | retTiltValueR0610 | O | M | M |
| bearing | bearing | O | M | M |
| maxTiltValue | maxTiltValueR0610 | O | M | M |
| minTiltValue | minTiltValueR0610 | O | M | M |
| mechanicalOffset | mechanicalOffsetR0610 | O | M | M |
| retGroupName | retGroupNameR0630 | O | M | M |
| height | heightR0610 | O | M | M |
| baseElevation | baseElevation | O | M | O |
| latitude | latitude | O | M | O |
| longitude | longitude | O | M | M |
| maxAzimuthValue | maxAzimuthValue | O | M | M |
| minAzimuthValue | minAzimuthValue | O | M | M |
| horizBeamwidth | horizBeamwidth | O | M | M |
| vertBeamwidth | vertBeamwidth | O | M | M |
| patternLabel | patternLabel | O | M | O |

### 4.2.2.8 Attribute Mapping of the IOC *ExternalRncFunction*

| IS Attribute | CMIP SS Attribute | Support Qualifier | Read Qualifier | Write Qualifier |
|---|---|---|---|---|
| externalRncFunctionId | externalRncFunctionId | M | M | -- |
| userLabel | userLabel | M | M | M |
| mcc | mcc | M | M | M |
| mnc | mnc | M | M | M |
| rncId | rncIdR55 | M | M | M |
| controlledCellList | controlledCellList | O | M | -- |

### 4.2.3 Mapping of Name Containments

| IS Name Containment | CMIP SS Name Binding |
|---|---|
| rncFunction-managedElement | rncFunctionR55-managedElement |
| nodeBFunction-managedElement | nodeBFunction-managedElement |
| utranCell-rncFunction | utranCellR0630-rncFunctionR55 |
| utranRelation-utranCell | utranRelationR0630-utranCellR0630 |
| externalUtranCell-subNetwork | externalUtranCellR0630-subNetworkR60 |
| iubLink-rncFunction | iubLink-rncFunctionR55 |
| gsmRelation-utranCell | gsmRelation-utranCellR0630 |
| antennaFunction-managedElement | antennaFunctionR0630-managedElement |
| externalRncFunction-subNetwork | externalRncFunction-subNetworkR60 |

# -- 5 GDMO Definitions

```
--Please do not remove the "—" in front of the headline numbering, as it is the CMIP code
--for a comment. This way the whole chapter can be put directly into a compiler.
```

## -- 5.1.1 rncFunction

```
rncFunctionR55 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      rncFunctionBasicPackage,
      rncFunctionHandoverPackageR55,
      "3GPP TS 32.111-4": 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 {ts32-644ObjectClass 8};
```

## -- 5.1.2 utranCell

```
utranCellR0630 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      utranCellBasicPackage,
      utranCellHandoverPackageR0630,
      utranCellAssociationPackage,
      "3GPP TS 32.111-4": x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      utranFDDCellHandoverPackageR630
         PRESENT IF
           "FDD handover attributes are supported by an instance of this class.",
      utran1-28McpsTDDCellHandoverPackageR630
         PRESENT IF
           "1.28 Mcps TDD handover attributes are supported by an instance of this class.",
      utran3-84McpsTDDCellHandoverPackageR630
         PRESENT IF
           "3.84 Mcps TDD handover attributes 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
              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": operationalStateAttributePackage
         PRESENT IF
           "instances of this MOC support the operationalState attribute." ,
      utranCellRetPackageR0610
         PRESENT IF
           "instances of this MOC support the retAntennaFunctionList attribute.";
REGISTERED AS {ts32-644ObjectClass 20630};
```

## -- 5.1.3 utranRelation

```
utranRelationR0630 MANAGED OBJECT CLASS
   DERIVED FROM
      "Rec. X.721 | ISO/IEC 10165-2 : 1992":top;
   CHARACTERIZED BY
      utranRelationBasicPackageR0600,
```

```
      utranRelationAssociationPackage;
   CONDITIONAL PACKAGES
      utranRelationFDDHandoverPackageR630
          PRESENT IF
             "FDD handover attributes are supported by an instance of this class.",
      utranRelationTDDHandoverPackageR630
          PRESENT IF
             " TDD handover attributes 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
              is supported by an instance of this class.";
REGISTERED AS {ts32-644ObjectClass 30630};
```

## -- 5.1.4 externalUtranCell

```
externalUtranCellR0630 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      externalUtranCellPackageR0630;
   CONDITIONAL PACKAGES
      externalUtranFDDCellHandoverPackageR630
          PRESENT IF
             "FDD handover attributes are supported by an instance of this class.",
      externalUtranTDDCellHandoverPackageR630
          PRESENT IF
             " TDD handover attributes are supported by an instance of this class.",
      externalUtranCellAssociationPackage
          PRESENT IF
             "an instance supports it.",
      "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 {ts32-644ObjectClass 40630};
```

## -- 5.1.5 iubLink

```
iubLinkR0600 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      iubLinkBasicPackage,
      iubLinkAssociationPackage,
      "3GPP TS 32.111-4": x721AlarmNotificationsPackage;
   CONDITIONAL PACKAGES
      iubLink2aTMChannelTerminationPointAssociationPackage
          PRESENT IF
             "the Transport Network NRM IRP (TS 32.714) is supported",
      "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 {ts32-644ObjectClass 50600};
```

## -- 5.1.6 nodeBFunction

```
nodeBFunction MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
```

```
      nodeBFunctionBasicPackage,
      nodeBFunctionAssociationPackage,
      "3GPP TS 32.111-4": 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 {ts32-644ObjectClass 6};
```

## -- 5.1.7 antennaFunction

```
antennaFunctionR0630 MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      antennaFunctionBasicPackageR0610,
      "3GPP TS 32.111-4": 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.",
      antennaFunctionOptionalPackageR0630
          PRESENT IF
             "the optional attributes are supported by an instance of this class.";
REGISTERED AS {ts32-644ObjectClass 70630};
```

## -- 5.1.8 externalRncFunction

```
externalRncFunction MANAGED OBJECT CLASS
   DERIVED FROM
      "3GPP TS 32.624": managedFunction;
   CHARACTERIZED BY
      externalRncFunctionBasicPackage;
   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.",
      externalRncFunctionAssociationPackage
          PRESENT IF
             "an instance supports it";
REGISTERED AS {ts32-644ObjectClass 80620};
```

# -- 5.2 Packages

## -- 5.2.1 rncFunctionHandoverPackage

```
rncFunctionHandoverPackageR55 PACKAGE
   BEHAVIOUR
      rncFunctionHandoverPackageR55Behaviour;
   ATTRIBUTES
      mcc           GET-REPLACE,
      mnc           GET-REPLACE,
      rncIdR55      GET-REPLACE;
REGISTERED AS {ts32-644Package 14};

rncFunctionHandoverPackageR55Behaviour BEHAVIOUR
```

```
DEFINED AS
   "This package contains all new attributes defined for UTRAN handover management.
    These attributes are introduced in R4.";
```

## -- 5.2.2 utranCellHandoverPackage

```
utranCellHandoverPackageR0630 PACKAGE
   BEHAVIOUR
      utranCellHandoverPackageR0630Behaviour;
   ATTRIBUTES
      cIdR55                       GET-REPLACE,
      localCellIdR55               GET-REPLACE,
      maximumTransmissionPowerR630 GET-REPLACE,
      cellMode                     GET,
      lacR630                      GET-REPLACE,
      racR630                      GET-REPLACE,
      sacR630                      GET-REPLACE,
      uraListR630                  GET-REPLACE;
REGISTERED AS {ts32-644Package 20630};

utranCellHandoverPackageR0630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of utranCell required for handover management
    in the FDD mode, the 1.28 Mcps TDD mode and the 3.84 Mcps TDD mode.";
```

## -- 5.2.3 utranRelationBasicPackage

```
utranRelationBasicPackageR0600 PACKAGE
   BEHAVIOUR
      utranRelationBasicPackageR0600Behaviour;
   ATTRIBUTES
      utranRelationId      GET,
      cellMode             GET;
REGISTERED AS {ts32-644Package 30600};

utranRelationBasicPackageR0600Behaviour BEHAVIOUR
DEFINED AS
   "The package contains the attributes of utranRelation required for the relation from utranCell
    to utranCell or externalUtranCell in the FDD mode, the 1.28 Mcps TDD mode and the 3.84 Mcps TDD
    mode. Note: In handover relation terms, the cell containing the UTRAN Relation object is the
    source cell for the handover. The cell referred to in the UTRAN 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.";
```

## -- 5.2.4 utranRelationAssociationPackage

```
utranRelationAssociationPackage PACKAGE
   BEHAVIOUR
      utranRelationAssociationPackageBehaviour;
   ATTRIBUTES
      adjacentCell      GET-REPLACE;
REGISTERED AS {ts32-644Package 4};

utranRelationAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains all attributes implementing associations related to an utranRelation";
```

## -- 5.2.5 externalUtranCellPackage

```
externalUtranCellPackageR0630 PACKAGE
   BEHAVIOUR
      externalUtranCellPackageR0630Behaviour;
   ATTRIBUTES
      externalUtranCellIdR630    GET,
      cIdR55                     GET-REPLACE,
      mcc                        GET-REPLACE,
      mnc                        GET-REPLACE,
      rncIdR55                   GET-REPLACE,
      cellMode                   GET,
      lacR630                    GET-REPLACE,
      racR630                    GET-REPLACE;
REGISTERED AS {ts32-644Package 50630};
```

```
externalUtranCellPackageR0630Behaviour BEHAVIOUR
DEFINED AS
   "This Managed Object Class represents a radio cell controlled by another IRPAgent.";
```

## -- 5.2.6 rncFunctionBasicPackage

```
rncFunctionBasicPackage PACKAGE
   BEHAVIOUR
      rncFunctionBasicPackageBehaviour;
   ATTRIBUTES
      rncFunctionId      GET;
REGISTERED AS {ts32-644Package 6};

rncFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "The MOC rncFunction represents UMTS RNC function.";
```

## -- 5.2.7 utranCellBasicPackage

```
utranCellBasicPackage PACKAGE
   BEHAVIOUR
      utranCellBasicPackageBehaviour;
   ATTRIBUTES
      utranCellId   GET;
REGISTERED AS {ts32-644Package 7};

utranCellBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "This managed object class represents the radio cell controlled by a RNC.";
```

## -- 5.2.8 utranCellAssociationPackage

```
utranCellAssociationPackage PACKAGE
   BEHAVIOUR
      utranCellAssociationPackageBehaviour;
   ATTRIBUTES
      utranCell2iubLink      GET;
REGISTERED AS {ts32-644Package 8};

utranCellAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the pointer attributes that implement associations related to utranCell.";
```

## -- 5.2.9 iubLinkBasicPackage

```
iubLinkBasicPackage PACKAGE
   BEHAVIOUR
      iubLinkBasicPackageBehaviour;
   ATTRIBUTES
      iubLinkId      GET;
REGISTERED AS {ts32-644Package 9};

iubLinkBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "This managed object class models the Iub Link between a Node-B and a RNC.";
```

## -- 5.2.10 iubLinkAssociation

```
iubLinkAssociationPackage PACKAGE
   BEHAVIOUR
      iubLinkAssociationPackageBehaviour;
   ATTRIBUTES
      iubLink2nodeBFunction      GET,
      iubLink2utranCell          GET;
REGISTERED AS {ts32-644Package 10};

iubLinkAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "The attribute 'iubLink2NodeBFunction' points to the nodeBFunction instance which this
    iubLink instance connects to. The attribute ‘iubLink2utranCell’ points to a list of
    utranCell instances which attach to the nodeBFunction this iubLink connects to.";
```

## -- 5.2.11 nodeBFunctionBasicPackage

```
nodeBFunctionBasicPackage PACKAGE
   BEHAVIOUR
      nodeBFunctionBasicPackageBehaviour;
   ATTRIBUTES
      nodeBFunctionId      GET;
REGISTERED AS {ts32-644Package 11};

nodeBFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "This managed object class represents the NodeB functionality.";
```

## -- 5.2.12 nodeBFunctionAssociationPackage

```
nodeBFunctionAssociationPackage PACKAGE
   BEHAVIOUR
      nodeBFunctionAssociationPackageBehaviour;
   ATTRIBUTES
      nodeB2iubLink      GET;
REGISTERED AS {ts32-644Package 12};

nodeBFunctionAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "The attribute 'nodeB2iubLink' points to the iubLink instance
    which connects to this nodeBFunction instance directly.";
```

## -- 5.2.13 utranFDDCellHandoverPackage

```
utranFDDCellHandoverPackageR630 PACKAGE
   BEHAVIOUR
      utranFDDCellHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnUlR630               GET-REPLACE,
      uarfcnDlR630               GET-REPLACE,
      primaryScramblingCodeR630  GET-REPLACE,
      primaryCpichPowerR630      GET-REPLACE,
      primarySchPowerR630        GET-REPLACE,
      secondarySchPowerR630      GET-REPLACE,
      bchPowerR630               GET-REPLACE;
REGISTERED AS {ts32-644Package 130630};

utranFDDCellHandoverPackageBehaviourR630 BEHAVIOUR
DEFINED AS
   "This package contains the attributes of UtranCell required for handover management
    in the FDD mode.";
```

## -- 5.2.14 utran1-28McpsTDDCellHandoverPackage

```
utran1-28McpsTDDCellHandoverPackageR630 PACKAGE
   BEHAVIOUR
      utran1-28McpsTDDCellHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnR630            GET-REPLACE,
      cellParameterId       GET-REPLACE,
      primaryCcpchPower     GET-REPLACE,
      dwPchPower            GET-REPLACE,
      timeSlotList          GET-REPLACE;
REGISTERED AS {ts32-644Package 140600};

utran1-28McpsTDDCellHandoverPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of UtranCell required for handover management
    in the 1.28 Mcps TDD mode.";
```

## -- 5.2.15 utran3-84McpsTDDCellHandoverPackage

```
utran3-84McpsTDDCellHandoverPackageR630 PACKAGE
   BEHAVIOUR
      utran3-84McpsTDDCellHandoverPackageR630Behaviour;
```

```
   ATTRIBUTES
      uarfcnR630             GET-REPLACE,
      cellParameterId        GET-REPLACE,
      primaryCcpchPower      GET-REPLACE,
      schPower               GET-REPLACE,
      timeSlotList           GET-REPLACE;
REGISTERED AS {ts32-644Package 150630};

utran3-84McpsTDDCellHandoverPackageR630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of utranCell required for handover management
    in the 3.84 Mcps TDD mode.";
```

## -- 5.2.16 utranRelationFDDHandoverPackage

```
utranRelationFDDHandoverPackageR630 PACKAGE
   BEHAVIOUR
      utranRelationFDDHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnUlR630               GET,
      uarfcnDlR630               GET,
      primaryScramblingCodeR630  GET,
      primaryCpichPowerR630      GET,
      lac630                     GET;
REGISTERED AS {ts32-644Package 160630};

utranRelationFDDHandoverPackageR630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of an utranRelation required for FDD handover management.";
```

## -- 5.2.17 utranRelationTDDHandoverPackage

```
utranRelationTDDHandoverPackageR630 PACKAGE
   BEHAVIOUR
      utranRelationTDDHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnR630             GET,
      cellParameterId        GET,
      primaryCcpchPower      GET,
      lacR630                GET;
REGISTERED AS {ts32-644Package 170630};

utranRelationTDDHandoverPackageR630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of an utranRelation required for TDD handover management.";
```

## -- 5.2.18 externalUtranFDDCellHandoverPackage

```
externalUtranFDDCellHandoverPackageR630 PACKAGE
   BEHAVIOUR
      externalUtranFDDCellHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnUlR630                 GET-REPLACE,
      uarfcnDlR630                 GET-REPLACE,
      primaryScramblingCodeR630    GET-REPLACE,
      primaryCpichPowerR630        GET-REPLACE;
REGISTERED AS {ts32-644Package 180630};

externalUtranFDDCellHandoverPackageR630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of externalUtranCell required
    for FDD handover management.";
```

## -- 5.2.19 externalUtranTDDCellHandoverPackage

```
externalUtranTDDCellHandoverPackageR630 PACKAGE
   BEHAVIOUR
      externalUtranTDDCellHandoverPackageR630Behaviour;
   ATTRIBUTES
      uarfcnR630            GET-REPLACE,
      cellParameterId       GET-REPLACE,
      primaryCcpchPower     GET-REPLACE;
REGISTERED AS {ts32-644Package 190630};
```

```
externalUtranTDDCellHandoverPackageR630Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of externalUtranCell required
    for TDD handover management.";
```

## -- 5.2.20 iubLink2aTMChannelTerminationPointAssociationPackage

```
iubLink2aTMChannelTerminationPointAssociationPackage PACKAGE
   BEHAVIOUR
      iubLink2aTMChannelTerminationPointAssociationPackageBehaviour;
   ATTRIBUTES
      iubLink2aTMChannelTerminationPoint     GET;
REGISTERED AS {ts32-644Package 200600};

iubLink2aTMChannelTerminationPointAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the attribute iubLink2aTMChannelTerminationPoint pointing to the
    ATMChannelTerminationPoint instances associated to this IubLink.";
```

## -- 5.2.21 utranCellRetPackage

```
utranCellRetPackageR0610 PACKAGE
   BEHAVIOUR
      utranCellRetPackageR0610Behaviour;
   ATTRIBUTES
      retAntennaFunctionListR0610        GET-REPLACE ADD-REMOVE
      ;
REGISTERED AS {ts32-644Package 210610};

utranCellRetPackageR0610Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attributes of utranCell related to RET.";
```

## -- 5.2.22 antennaFunctionBasicPackage

```
antennaFunctionBasicPackageR0610 PACKAGE
   BEHAVIOUR
      antennaFunctionBasicPackageR0610Behaviour;
   ATTRIBUTES
      antennaFunctionIdR0610        GET
      ;
REGISTERED AS {ts32-644Package 220610};

antennaFunctionBasicPackageR0610Behaviour BEHAVIOUR
DEFINED AS
   "This package contains the attribute antennaFunctionId and possibly mandatory attributes of
antennaFunction.";
```

## -- 5.2.23 antennaFunctionOptionalPackage

```
antennaFunctionOptionalPackageR0630 PACKAGE
   BEHAVIOUR
      antennaFunctionOptionalPackageR0630Behaviour;
   ATTRIBUTES
      retUtranCellListR0610        GET-REPLACE,
      retTiltValueR0610            GET-REPLACE,

      maxTiltValueR0610            GET-REPLACE,
      minTiltValueR0610            GET-REPLACE,
      mechanicalOffsetR0610        GET-REPLACE,
      retGroupNameR0630            GET-REPLACE,
      heightR0610                  GET-REPLACE,
      bearing                      GET-REPLACE,
      baseElevation                GET-REPLACE,
      latitude                     GET-REPLACE,
      longitude                    GET-REPLACE,
      maxAzimuthValue              GET-REPLACE,
      minAzimuthValue              GET-REPLACE,
      horizBeamwidth               GET-REPLACE,
      vertBeamwidth                GET-REPLACE,
      patternLabel                 GET-REPLACE
      ;
```

```
REGISTERED AS {ts32-644Package 230630};

antennaFunctionOptionalPackageR0630Behaviour BEHAVIOUR
DEFINED AS
    "This package contains the optional attributes of antennaFunction except
     antennaFunctionId.";
```

## -- 5.2.24 externalUtranCellAssociationPackage

```
externalUtranCellAssociationPackage PACKAGE
   BEHAVIOUR
      externalUtranCellAssociationPackageBehaviour;
   ATTRIBUTES
      controllingRnc              GET-REPLACE;
REGISTERED AS {ts32-644Package 240620};

externalUtranCellAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the attribute controllingRnc.";
```

## -- 5.2.25 externalRncFunctionBasicPackage

```
externalRncFunctionBasicPackage PACKAGE
   BEHAVIOUR
      externalRncFunctionBasicPackageBehaviour;
   ATTRIBUTES
      externalRncFunctionId         GET,
      mcc                           GET-REPLACE,
      mnc                           GET-REPLACE,
      rncIdR55                      GET-REPLACE;
REGISTERED AS {ts32-644Package 250620};

externalRncFunctionBasicPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the mandatory attributes of MOC externalRncFuntion.";
```

## -- 5.2.26 externalRncFunctionAssociationPackage

```
externalRncFunctionAssociationPackage PACKAGE
   BEHAVIOUR
      externalRncFunctionAssociationPackageBehaviour;
   ATTRIBUTES
      controlledCellList            GET;
REGISTERED AS {ts32-644Package 260620};

externalRncFunctionAssociationPackageBehaviour BEHAVIOUR
DEFINED AS
   "This package contains the optional attribute of MOC externalRncFuntion.";
```

# -- 5.3 Attributes

## -- 5.3.1 mcc

```
mcc ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.MobileCountryCode;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      mccBehaviour;
REGISTERED AS {ts32-644Attribute 1};

mccBehaviour BEHAVIOUR
DEFINED AS
   "Mobile Country Code, MCC. It is a part of the PLMN Id (Ref. 3 GPP TS 23.003).";
```

## -- 5.3.2 mnc

```
mnc ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.MobileNetworkCode;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      mncBehaviour;
REGISTERED AS {ts32-644Attribute 2};

mncBehaviour BEHAVIOUR
DEFINED AS
   "Mobile Network Code, MNC. It is a part of the PLMN Id (Ref. 3 GPP TS 23.003).";
```

## -- 5.3.3 rncId

```
rncIdR55 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.RncId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      rncIdR55Behaviour;
REGISTERED AS {ts32-644Attribute 31};

rncIdR55Behaviour BEHAVIOUR
DEFINED AS
   "Unique RNC ID (Ref. 3 GPP TS 23.003).";
```

## -- 5.3.4 cId

```
cIdR55 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.CId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      cIdR55Behaviour;
REGISTERED AS {ts32-644Attribute 32};

cIdR55Behaviour BEHAVIOUR
DEFINED AS
   "cId is the identifier of a cell in one RNC (Ref. 3 GPP TS 25.401).";
```

## -- 5.3.5 localCellId

```
localCellIdR55 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.LocalCellId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      localCellIdR55Behaviour;
REGISTERED AS {ts32-644Attribute 33};

localCellIdR55Behaviour BEHAVIOUR
DEFINED AS
   "Local Cell id is used to uniquely identify the set of resources defined in a Node B
    to support a cell (as defined by a Cid Ref. 3 GPP TS 25.401). It must be unique in
    Node B at a minimum, but may be unique in UTRAN. It can be used to tie the cell in the
    RNC to a specific set of resources in the Node B.";
```

## -- 5.3.6 uarfcnUl

```
uarfcnUlR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.UarfcnUlR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      uarfcnUlR630Behaviour;
```

```
REGISTERED AS {ts32-644Attribute 60630};

uarfcnUlR630Behaviour BEHAVIOUR
DEFINED AS
   "The UL UTRA absolute Radio Frequency Channel number in an FDD mode cell,
     UARFCN (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.7 uarfcnDl

```
uarfcnDlR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.UarfcnDlR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      uarfcnDlR630Behaviour;
REGISTERED AS {ts32-644Attribute 70630};

uarfcnDlR630Behaviour BEHAVIOUR
DEFINED AS
   "The DL UTRA absolute Radio Frequency Channel number in an FDD mode cell,
     UARFCN (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.8 primaryScramblingCode

```
primaryScramblingCodeR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.PrimaryScramblingCodeR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      primaryScramblingCodeR630Behaviour;
REGISTERED AS {ts32-644Attribute 80630};

primaryScramblingCodeR630Behaviour BEHAVIOUR
DEFINED AS
   "The primary DL scrambling code used by the FDD mode cell (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.9 primaryCpichPower

```
primaryCpichPowerR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.PrimaryCpichPowerR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      primaryCpichPowerR630Behaviour;
REGISTERED AS {ts32-644Attribute 90630};

primaryCpichPowerR630Behaviour BEHAVIOUR
DEFINED AS
   "The power of the primary CPICH channel in the FDD mode cell (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.10 maximumTransmissionPower

```
maximumTransmissionPowerR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.MaximumTransmissionPowerR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      maximumTransmissionPowerR630Behaviour;
REGISTERED AS {ts32-644Attribute 10};

maximumTransmissionPowerR630Behaviour BEHAVIOUR
DEFINED AS
   "The maximum transmission power of a cell, DL Power (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.11 primarySchPower

```
primarySchPowerR630 ATTRIBUTE
```

```
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.PrimarySchPowerR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      primarySchPowerR630Behaviour;
REGISTERED AS {ts32-644Attribute 110630};

primarySchPowerR630Behaviour BEHAVIOUR
DEFINED AS
   "The power of the primary synchronisation channel in the FDD mode cell,
    DL Power (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.12 secondarySchPower

```
secondarySchPowerR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.SecondarySchPowerR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      secondarySchPowerBehaviourR630;
REGISTERED AS {ts32-644Attribute 120630};

secondarySchPowerBehaviourR630 BEHAVIOUR
DEFINED AS
   "The power of the secondary synchronisation channel in the FDD mode cell,
    DL Power (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.13 bchPower

```
bchPowerR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.BchPowerR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      bchPowerBehaviour;
REGISTERED AS {ts32-644Attribute 130630};

bchPowerBehaviour BEHAVIOUR
DEFINED AS
   "The power of the broadcast channel in the FDD mode cell (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.14 lac

```
lacR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Lac630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      lacR630Behaviour;
REGISTERED AS {ts32-644Attribute 140630};

lacR630Behaviour BEHAVIOUR
DEFINED AS
   "Location Area Code, LAC (Ref. 3 GPP TS 23.003)";
```

## -- 5.3.15 rac

```
racR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Rac630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      racR630Behaviour;
REGISTERED AS {ts32-644Attribute 150630};

racR630Behaviour BEHAVIOUR
DEFINED AS
   "Routing Area Code, RAC (Ref. 3 GPP TS 23.003)";
```

## -- 5.3.16 sac

```
sacR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.SacR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      sacBehaviourR630;
REGISTERED AS {ts32-644Attribute 160630};

sacBehaviourR630 BEHAVIOUR
DEFINED AS
   "Service Area Code, SAC (Ref. 3 GPP TS 23.003)";
```

## -- 5.3.17 ura

-- Void.

## -- 5.3.18 utranRelationId

```
utranRelationId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      utranRelationIdBehaviour;
REGISTERED AS {ts32-644Attribute 18};

utranRelationIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies an utranRelation object.";
```

## -- 5.3.19 relationType

-- Void.

## -- 5.3.20 adjacentCell

```
adjacentCell ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointer;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      adjacentCellBehaviour;
REGISTERED AS {ts32-644Attribute 20};

adjacentCellBehaviour BEHAVIOUR
DEFINED AS
   "Pointer to UTRAN cell or external UTRAN cell. Distinguished name of the corresponding object.";
```

## -- 5.3.21 externalUtranCellId

```
externalUtranCellIdR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      externalUtranCellIdR630Behaviour;
REGISTERED AS {ts32-644Attribute 210630};

externalUtranCellIdR630Behaviour BEHAVIOUR
DEFINED AS
   "This attribute identifies an externalUtranCell object.";
```

## -- 5.3.22 rncFunctionId

```
rncFunctionId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      rncFunctionIdBehaviour;
REGISTERED AS {ts32-644Attribute 22};

rncFunctionIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the 'rncFunction' object class.";
```

## -- 5.3.23 utranCellId

```
utranCellId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      utranCellIdBehaviour;
REGISTERED AS {ts32-644Attribute 23};

utranCellIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the 'utranCell' object class.";
```

## -- 5.3.24 utranCell2iubLink

```
utranCell2iubLink ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointer;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      utranCell2iubLinkBehaviour;
REGISTERED AS {ts32-644Attribute 24};

utranCell2iubLinkBehaviour BEHAVIOUR
DEFINED AS
   "This attribute points to the iubLink instance connecting to this utranCell.";
```

## -- 5.3.25 iubLinkId

```
iubLinkId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      iubLinkIdBehaviour;
REGISTERED AS {ts32-644Attribute 25};

iubLinkIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the 'iubLink' object class.";
```

## -- 5.3.26 iubLink2nodeBFunction

```
iubLink2nodeBFunction ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointer;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      iubLink2nodeBFunctionBehaviour;
REGISTERED AS {ts32-644Attribute 26};

iubLink2nodeBFunctionBehaviour BEHAVIOUR
```

```
DEFINED AS
   "This attribute points to the nodeBFunction instance which this iubLink instance
    connects directly to.";
```

## -- 5.3.27 iubLink2utranCell

```
iubLink2utranCell ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointerList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      iubLink2utranCellBehaviour;
REGISTERED AS {ts32-644Attribute 27};

iubLink2utranCellBehaviour BEHAVIOUR
DEFINED AS
   "This attribute points from an iubLink instance to a list of utranCell instance";
```

## -- 5.3.28 nodeBFunctionId

```
nodeBFunctionId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      nodeBFunctionIdBehaviour;
REGISTERED AS {ts32-644Attribute 28};

nodeBFunctionIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the 'nodeBFunction' object class.";
```

## -- 5.3.29 nodeB2iubLink

```
nodeB2iubLink ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointer;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      nodeB2iubLinkBehaviour;
REGISTERED AS {ts32-644Attribute 29};

nodeB2iubLinkBehaviour BEHAVIOUR
DEFINED AS
   "This attribute points to the IubLink instance which connects to the
    related nodeBFunction instance directly.";
```

## -- 5.3.30 uraList

```
uraListR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.UraListR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      uraListR630Behaviour;
REGISTERED AS {ts32-644Attribute 300630};

uraListR630Behaviour BEHAVIOUR
DEFINED AS
   "List of UTRAN Registration Area, URA (Ref. 3 GPP TS 25.331)";
```

## -- 5.3.31 uarfcn

```
uarfcnR630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.UarfcnR630;
   MATCHES FOR
```

```
      EQUALITY;
   BEHAVIOUR
      uarfcnR630Behaviour;
REGISTERED AS {ts32-644Attribute 310630};

uarfcnR630Behaviour BEHAVIOUR
DEFINED AS
   "The UTRA absolute Radio Frequency Channel number in a TDD mode cell,
    UARFCN (Ref. 3 GPP TS 25.433).";
```

## -- 5.3.32 cellParameterId

```
cellParameterId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.CellParameterId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      cellParameterIdBehaviour;
REGISTERED AS {ts32-644Attribute 320600};

cellParameterIdBehaviour BEHAVIOUR
DEFINED AS
   "The [3.84 Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset]
   [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes
   and the midamble codes] of the cell (Ref. 3GPP TS 25.433).";
```

## -- 5.3.33 primaryCcpchPower

```
primaryCcpchPower ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.PrimaryCcpchPower;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      primaryCcpchPowerBehaviour;
REGISTERED AS {ts32-644Attribute 330600};

primaryCcpchPowerBehaviour BEHAVIOUR
DEFINED AS
   "The power of the primary CCPCH channel in the TDD cell (Ref. 3GPP TS 25.433).";
```

## -- 5.3.34 dwPchPower

```
dwPchPower ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.DwPchPower;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      dwPchPowerBehaviour;
REGISTERED AS {ts32-644Attribute 340600};

dwPchPowerBehaviour BEHAVIOUR
DEFINED AS
   "The power that shall be used for transmitting the DwPCH in a 1.28 Mcps TDD Mode cell.
   (Ref. 3GPP TS 25.433).";
```

## -- 5.3.35 timeSlotList

```
timeSlotList ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.TimeSlotList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      timeSlotListBehaviour;
REGISTERED AS {ts32-644Attribute 350600};

timeSlotListBehaviour BEHAVIOUR
DEFINED AS
   "This attribute defines the time slot list configuration information
   in the 1.28 Mcps TDD or 3.84 Mcps TDD cell,and it is a set which
```

```
   contains 7 (for 1.28 Mcps TDD cell) or 15 (for 3.84 Mcps TDD cell) items,
   within each item there are three parts: timeSlotId, timeSlotDirection,
   timeSlotStatus (Ref. 3GPP TS 25.433 [5]).";
```

## -- 5.3.36 schPower

```
schPower ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.SchPower;
   MATCHES FOR
        EQUALITY;
   BEHAVIOUR
        schPowerBehaviour;
REGISTERED AS {ts32-644Attribute 360600};

schPowerBehaviour BEHAVIOUR
DEFINED AS
   "The power of the synchronisation channel in 3.84 Mcps TDD cell. (Ref. 3GPP TS 25.433).";
```

## -- 5.3.37 cellMode

```
cellMode ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.CellMode;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      cellModeBehaviour;
REGISTERED AS {ts32-644Attribute 370600};

cellModeBehaviour BEHAVIOUR
DEFINED AS
   "This attribute is multivalued and indicates the modes (FDD mode, 1.28McpsTDD mode, 3.84Mcps).";
```

## -- 5.3.38 iubLink2aTMChannelTerminationPoint

```
iubLink2aTMChannelTerminationPoint ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointerList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      iubLink2aTMChannelTerminationPointBehaviour;
REGISTERED AS {ts32-644Attribute 380600};

iubLink2aTMChannelTerminationPointBehaviour BEHAVIOUR
DEFINED AS
   "The attribute iubLink2aTMChannelTerminationPoint points to the ATMChannelTerminationPoint
    instances associated to the IubLink holding this attribute.";
```

## -- 5.3.39 retAntennaFunctionList

```
retAntennaFunctionListR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointerList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      retAntennaFunctionListR0610Behaviour;
REGISTERED AS {ts32-644Attribute 390610};

retAntennaFunctionListR0610Behaviour BEHAVIOUR
DEFINED AS
   "The attribute retAntennaFunctionListR0610 points to the antennaFunction
    instance(s) associated to the utranCell holding this attribute.";
```

## -- 5.3.40 antennaFunctionId

```
antennaFunctionIdR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
```

```
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      antennaFunctionIdR0610Behaviour;
REGISTERED AS {ts32-644Attribute 400610};

antennaFunctionIdR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the ‘antennaFunctionIdR0610’ object class.";
```

## -- 5.3.41 retUtranCellList

```
retUtranCellListR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectPointerList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      retUtranCellListR0610Behaviour;
REGISTERED AS {ts32-644Attribute 410610};

retUtranCellListR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute retUtranCellList points to the utranCell instance(s( associated to the
    antennaFunction holding this attribute. i.e. to the utranCells(s) which are supported
    by the antenna.";
```

## -- 5.3.42 retTiltValue

```
retTiltValueR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Angle;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      retTiltValueR0610Behaviour;
REGISTERED AS {ts32-644Attribute 420610};

retTiltValueR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the tilt value of the antenna that has been made
    using electrical means (i.e. using RET).";
```

## -- 5.3.43 compassDirection

-- Void.

## -- 5.3.44 maxTiltValue

```
maxTiltValueR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Angle;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      maxTiltValueR0610Behaviour;
REGISTERED AS {ts32-644Attribute 440610};

maxTiltValueR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the maximum amount of tilt the RET system can support.";
```

## -- 5.3.45 minTiltValue

```
minTiltValueR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Angle;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      minTiltValueR0610Behaviour;
```

```
REGISTERED AS {ts32-644Attribute 450610};

minTiltValueR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the minimum amount of tilt the RET system can support. ";
```

## -- 5.3.46 mechanicalOffset

```
mechanicalOffsetR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Angle;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      mechanicalOffsetR0610Behaviour;
REGISTERED AS {ts32-644Attribute 460610};

mechanicalOffsetR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute represents a non-adjustable tilt value, which is imparted to the antenna due to
the physical installation. The actual tilt at any point in time is the summation of mechanicalOffset
and retTiltValue.";
```

## -- 5.3.47 retGroupName

```
retGroupNameR0630 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.RetGroupNameR630;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      retGroupNameR0630Behaviour;
REGISTERED AS {ts32-644Attribute 470630};

retGroupNameR0630Behaviour BEHAVIOUR
DEFINED AS
   "This attribute provides the possibility to define a logical grouping of antennas which may be in
different cells.";
```

## -- 5.3.48 height

```
heightR0610 ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Height;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      heightR0610Behaviour;
REGISTERED AS {ts32-644Attribute 480610};

heightR0610Behaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the height of an antenna above sea level.";
```

## -- 5.3.49 controllingRnc

```
controllingRnc ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.ControllingRnc;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      controllingRncBehaviour;
REGISTERED AS {ts32-644Attribute 490620};

controllingRncBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents ExternalUtranCell capability to identify one related
    ExternalRncFunction. It contains one ExternalRncFunction's DN.";
```

## -- 5.3.50 controlledCellList

```
controlledCellList ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.ControlledCellList;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      controlledCellListBehaviour;
REGISTERED AS {ts32-644Attribute 500620};

controlledCellListBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents represents the capability to identify the set of related
    ExternalUtranCell. It contains the set of ExternalUtranCell's DNs..";
```

## -- 5.3.51 externalRncFunctionId

```
externalRncFunctionId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.GeneralObjectId;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      externalRncFunctionIdBehaviour;
REGISTERED AS {ts32-644Attribute 510620};

externalRncFunctionIdBehaviour BEHAVIOUR
DEFINED AS
   "This attribute names an instance of the ExternalRncFunction object class.";
```

## -- 5.3.52 bearing

```
bearing ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Bearing;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      bearingBehaviour;
REGISTERED AS {ts32-644Attribute 520630};

bearingBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the bearing (in degrees) of an antenna. Note that bearing is the
   "true" heading (the compass heading offset by a true north variation).";
```

## -- 5.3.53 baseElevation

```
baseElevation ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.BaseElevation;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      baseElevationBehaviour;
REGISTERED AS {ts32-644Attribute 530630};

baseElevationBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the elevation in meters above sea level at the base of the antenna
   structure. This value, when subtracted from height, provides the height of the antenna above the
   ground.";
```

## -- 5.3.54 latitude

```
latitude ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Latitude;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
```

```
      latitudeBehaviour;
REGISTERED AS {ts32-644Attribute 540630};

latitudeBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the latitude of the antenna location based on World Geodetic System
   (1984 version) global reference frame (WGS 84). Positive values correspond to the northern
   hemisphere.";
```

## -- 5.3.55 longitude

```
longitude ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.Longitude;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      longitudeBehaviour;
REGISTERED AS {ts32-644Attribute 550630};

longitudeBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the longitude of the antenna location based on World Geodetic System
   (1984 version) global reference frame (WGS 84). Positive values correspond to degrees east of 0
   degrees longitude.";
```

## -- 5.3.56 maxAzimuthValue

```
maxAzimuthValue ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.MaxAzimuthValue;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      maxAzimuthValueBehaviour;
REGISTERED AS {ts32-644Attribute 560630};

maxAzimuthValueBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the maximum amount of change of azimuth the RET system can support.
   This is the change in degrees clockwise from bearing.";
```

## -- 5.3.57 minAzimuthValue

```
minAzimuthValue ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule. MinAzimuthValue;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      minAzimuthValueBehaviour;
REGISTERED AS {ts32-644Attribute 570630};

minAzimuthValueBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the minimum amount of change of azimuth the RET system can support.
   This is the change in degrees counter-clockwise from bearing.";
```

## -- 5.3.58 horizBeamwidth

```
horizBeamwidth ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.HorizBeamwidth;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      horizBeamwidthBehaviour;
REGISTERED AS {ts32-644Attribute 580630};

horizBeamwidthBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the 3 dB power beamwidth of the antenna pattern in the horizontal
   plane.";
```

## -- 5.3.59 vertBeamwidth

```
vertBeamwidth ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.VertBeamwidth;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      vertBeamwidthBehaviour;
REGISTERED AS {ts32-644Attribute 590630};

vertBeamwidthBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the 3 dB power beamwidth of the antenna pattern in the vertical
   plane.";
```

## -- 5.3.60 patternLabel

```
patternLabel ATTRIBUTE
   WITH ATTRIBUTE SYNTAX
      TS32-644TypeModule.PatternLabel;
   MATCHES FOR
      EQUALITY;
   BEHAVIOUR
      patternLabelBehaviour;
REGISTERED AS {ts32-644Attribute 600630};

patternLabelBehaviour BEHAVIOUR
DEFINED AS
   "This attribute represents the pattern name. This is a textual, alpha-numeric string to allow
identification of the antenna pattern along with the antenna vendor information.";
```

# -- 5.4 Name Binding

## -- 5.4.1 rncFunction - managedElement

```
rncFunctionR55-managedElement NAME BINDING
   SUBORDINATE OBJECT CLASS
      rncFunctionR55;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624": managedElement;
   WITH ATTRIBUTE
      rncFunctionId;
   BEHAVIOUR
      rncFunctionR55-managedElementBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 15};

rncFunctionR55-managedElementBehaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a managedElement contains
    and controls a rncFunctionR55. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.2 nodeBFunction - managedElement

```
nodeBFunction-managedElement NAME BINDING
   SUBORDINATE OBJECT CLASS
      nodeBFunction;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624": managedElement;
   WITH ATTRIBUTE
      nodeBFunctionId;
   BEHAVIOUR
      nodeBFunction-managedElementBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
```

```
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 2};

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

## -- 5.4.3 utranCell - rncFunction

```
utranCellR0630-rncFunctionR55 NAME BINDING
   SUBORDINATE OBJECT CLASS
      utranCellR0630;
   NAMED BY SUPERIOR OBJECT CLASS
      rncFunctionR55;
   WITH ATTRIBUTE
      utranCellId;
   BEHAVIOUR
      utranCellR0630-rncFunctionR55Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 30630};

utranCellR0630-rncFunctionR55Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a rncFunctionR55 contains
    and controls an utranCell. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.4 utranRelation - utranCell

```
utranRelationR0630-utranCellR0630 NAME BINDING
   SUBORDINATE OBJECT CLASS
      utranRelationR0630;
   NAMED BY SUPERIOR OBJECT CLASS
      utranCellR0630;
   WITH ATTRIBUTE
      utranRelationId;
   BEHAVIOUR
      utranRelationR0630-utranCellR0630Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 40630};

utranRelationR0630-utranCellR0630Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which an utranCell contains
    and controls an utranRelation. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.5 externalUtranCell - subNetwork

```
externalUtranCellR0630-subNetworkR60 NAME BINDING
   SUBORDINATE OBJECT CLASS
      externalUtranCellR0630;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624": subNetworkR60;
   WITH ATTRIBUTE
      externalUtranCellIdR630;
   BEHAVIOUR
      externalUtranCellR0630-subNetworkR60Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 50630};

externalUtranCellR0630-subNetworkR60Behaviour BEHAVIOUR
```

```
DEFINED AS
   "The name binding represents a relationship in which a subNetworkR60 contains
   and controls an externalUtranCellR0620. When automatic instance naming is used, the choice
   of name bindings is left as a local matter.";
```

## -- 5.4.6 vsDataContainer - rncFunction

-- Void.

## -- 5.4.7 vsDataContainer - nodeBFunction

-- Void.

## -- 5.4.8 vsDataContainer - utranCell

-- Void.

## -- 5.4.9 vsDataContainer - utranRelation

-- Void.

## -- 5.4.10 iubLink - rncFunction

```
iubLinkR0600-rncFunctionR55 NAME BINDING
   SUBORDINATE OBJECT CLASS
      iubLinkR0600;
   NAMED BY SUPERIOR OBJECT CLASS
      rncFunctionR55;
   WITH ATTRIBUTE
      iubLinkId;
   BEHAVIOUR
      iubLinkR0600-rncFunctionR55Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 100600};

iubLinkR0600-rncFunctionR55Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a rncFunctionR55 contains
    and controls a iubLinkR0600. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.11 gsmRelation - utranCell

```
gsmRelation-utranCellR0630 NAME BINDING
   SUBORDINATE OBJECT CLASS
      "3GPP TS 32.654": gsmRelation;
   NAMED BY SUPERIOR OBJECT CLASS
      utranCellR0630;
   WITH ATTRIBUTE
      "3GPP TS 32.654": gsmRelationId;
   BEHAVIOUR
      gsmRelation-utranCellR0630Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 110630};

gsmRelation-utranCellR0630Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which an utranCell contains
    and controls a gsmRelation. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.12 antennaFunction - managedElement

```
antennaFunctionR0630-managedElement NAME BINDING
   SUBORDINATE OBJECT CLASS
      antennaFunctionR0630;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624": managedElement;
   WITH ATTRIBUTE
      antennaFunctionIdR0610;
   BEHAVIOUR
      antennaFunctionR0630-managedElementBehaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 200630};

antennaFunctionR0610-managedElementBehaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a managedElement contains
    and controls a antennaFunctionR0610. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

## -- 5.4.13 externalRncFunction - subNetwork

```
externalRncFunction-subNetworkR60 NAME BINDING
   SUBORDINATE OBJECT CLASS
      externalRncFunction;
   NAMED BY SUPERIOR OBJECT CLASS
      "3GPP TS 32.624": subNetworkR60;
   WITH ATTRIBUTE
      externalRncFunctionId;
   BEHAVIOUR
      externalRncFunction-subNetworkR60Behaviour;
   CREATE
      WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;
   DELETE
      ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS {ts32-644NameBinding 130620};

externalRncFunction-subNetworkR60Behaviour BEHAVIOUR
DEFINED AS
   "The name binding represents a relationship in which a subNetworkR60 contains
    and controls a externalRncFunction. When automatic instance naming is used, the choice
    of name bindings is left as a local matter.";
```

# 6 ASN.1 Definitions

```
TS32-644TypeModule {ccitt(0) identified-organization(4) etsi(0) mobileDomain(0) umts-Operation-
Maintenance(3) ts32-644(644) informationModel(0) asn1Module(2) version10610(10610)}


DEFINITIONS IMPLICIT TAGS ::=
BEGIN

--EXPORTS everything

IMPORTS

GeneralObjectId, GeneralObjectPointer, GeneralObjectPointerList
   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)}

MobileCountryCode, MobileNetworkCode, LocationAreaCode
   FROM GSM1220TypeModule {ccitt(0) identified-organization(4) etsi(0) mobileDomain(0)
   gsm-Operation-Maintenance(3) gsm-12-20(20) informationModel(0) asn1Module(2)
   asn1TypeModule(0)};


-- 3GPP TS 32.644 related Object Identifiers

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

ts32-644               OBJECT IDENTIFIER ::= {baseNodeUMTS ts32-644(644)}
ts32-644InfoModel      OBJECT IDENTIFIER ::= {ts32-644 informationModel(0)}

ts32-644ObjectClass    OBJECT IDENTIFIER ::= {ts32-644InfoModel managedObjectClass(3)}
ts32-644Package        OBJECT IDENTIFIER ::= {ts32-644InfoModel package(4)}
ts32-644Parameter      OBJECT IDENTIFIER ::= {ts32-644InfoModel parameter(5)}
ts32-644NameBinding    OBJECT IDENTIFIER ::= {ts32-644InfoModel nameBinding(6)}
ts32-644Attribute      OBJECT IDENTIFIER ::= {ts32-644InfoModel attribute(7)}
ts32-644Action         OBJECT IDENTIFIER ::= {ts32-644InfoModel action(9)}
ts32-644Notification   OBJECT IDENTIFIER ::= {ts32-644InfoModel notification(10)}


-- Start of 3GPP SA5 own definitions

Angle ::= INTEGER (0..3599)            --unit is 0.1 degrees

BaseElevation ::= INTEGER

BchPowerR630 ::= INTEGER (-350..150)   --unit is 0.1 dB

Bearing ::= Angle

CellMode ::= ENUMERATED
   {
   fddMode                 (0),
   one-28McpsTDDMode       (1),
   three-84McpsTDDMode     (2)
   }

CellParameterId ::= INTEGER (0..127)

CId ::= INTEGER

ControlledCellList ::= GeneralObjectPointerList

ControllingRnc ::= GeneralObjectPointer

DwPchPower ::= INTEGER (-150..400)    --unit is 0.1 dB

Height ::= INTEGER

HorizBeamwidth ::= Angle

LacR630 ::= INTEGER (1..65535)

Latitude ::= INTEGER
```

```
LocalCellId ::= INTEGER

Longitude ::= INTEGER

MaxAzimuthValue ::= Angle             --unit is 0.1 degrees

MaxTiltValue ::= Angle                --unit is 0.1 degrees

MaximumTransmissionPowerR630 ::= INTEGER (0..500)       --unit is 0.1dB

MechanicalOffset ::= Angle

MinAzimuthValue ::= Angle             --unit is 0.1 degrees

MinTiltValue ::= Angle                --unit is 0.1 degrees

PatternLabel ::= GraphicString

PrimaryCcpchPower ::= INTEGER (-150..400)       --unit is 0.1dB

PrimaryCpichPowerR630 ::= INTEGER (-100..500)   --unit is 0.1dB

PrimarySchPowerR630 ::= INTEGER (-350..150)     --unit is 0.1dB

PrimaryScramblingCodeR630 ::= INTEGER (0..511)

RacR630 ::= INTEGER (0..255)

RetGroupNameR630 ::= GraphicString (80)

RetTiltValue ::= Angle                --unit is 0.1 degrees

RncId ::= INTEGER

SacR630 ::= INTEGER (0..65535)

SchPower ::= INTEGER (-350..150)                --unit is 0.1dB

SecondarySchPowerR630 ::= INTEGER (-350..150)   --unit is 0.1dB

TimeSlotDirection ::= ENUMERATED
   {
   ul      (0),
   dl      (1)
   }

TimeSlotId ::= INTEGER

TimeSlotList ::= SET OF SEQUENCE
   {
   timeSlotId             TimeSlotId,    -- range of timeSlotId:
                                         -- (0..6) when applied to 1.28Mcps TDD Mode Cell
                                         -- (0..14) when applied to 3.84Mcps TDD Mode Cell

   timeSlotDirection      TimeSlotDirection,
   timeSlotStatus         TimeSlotStatus
   }

TimeSlotStatus ::= ENUMERATED
   {
   active        (0),
   not-active    (1)
   }

UarfcnR630 ::= INTEGER (0..16383)

UarfcnDlR630 ::= INTEGER (0..16383)

UarfcnUlR630 ::= INTEGER (0..16383)

Ura ::= INTEGER (0..65535)

UraListR630 ::= SET OF URA

VertBeamwidth ::= INTEGER (0..1800)      --unit is 0.1 degrees
```

```
END -- of TS32-644TypeModule
```

# Annex A (informative): List of assigned Object Identifiers

This annex provides a list with all object identifiers that have been assigned in TS 32.644 in Release 5 up to V5.6.0 and in Release 6 up to the latest version. These object identifiers shall 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** | | |
| rncFunction | Name: rncFunctionR55<br>OID : ts32-644ObjectClass 8 | Name: rncFunction<br>OID : ts32-644ObjectClass 1 |
| utranCell | Name: utranCellR0630<br>OID : ts32-644ObjectClass 20630 | Name: utranCellR55<br>OID : ts32-644ObjectClass 9<br>Name: utranCellR54<br>OID : ts32-644ObjectClass 7<br>Name: utranCell<br>OID : ts32-644ObjectClass 2<br>Name: utranCellR0600<br>OID : ts32-644ObjectClass 20600<br>Name: utranCellR0610<br>OID : ts32-644ObjectClass 20610 |
| utranRelation | Name: utranRelationR0630<br>OID : ts32-644ObjectClass 30630 | Name: utranRelation<br>OID : ts32-644ObjectClass 3<br>Name: utranRelationR0600<br>OID : ts32-644ObjectClass 30600 |
| externalUtranCell | Name: externalUtranCellR0630<br>OID : ts32-644ObjectClass 40630 | Name: externalUtranCellR0506<br>OID : ts32-644ObjectClass 40506<br>Name: externalUtranCell<br>OID : ts32-644ObjectClass 4<br>Name: externalUtranCellR0600<br>OID : ts32-644ObjectClass 40600<br>Name: externalUtranCellR0620<br>OID : ts32-644ObjectClass 40620 |
| iubLink | Name: iubLinkR0600<br>OID : ts32-644ObjectClass 50600 | Name: iubLink<br>OID : ts32-644ObjectClass |
| nodeBFunction | Name: nodeBFunction<br>OID : ts32-644ObjectClass 6 | -- |
| antennaFunction | Name: antennaFunctionR0630<br>OID : ts32-644ObjectClass 70630 | Name: antennaFunctionR0610<br>OID : ts32-644ObjectClass 70610 |
| externalRncFunction | Name: externalRncFunction<br>OID : ts32-644ObjectClass 80620 | -- |
| **Packages** | | |
| rncFunctionHandoverPackage | Name: rncFunctionHandoverPackageR55<br>OID : ts32-644Package 14 | Name: rncFunctionHandoverPackage<br>OID : ts32-644Package 1 |
| utranCellHandoverPackage | Name: utranCellHandoverPackageR0630<br>OID : ts32-644Package 20630 | Name: utranCellHandoverPackageR55<br>OID : ts32-644Package 15<br>Name: utranCellHandoverPackageR54<br>OID : ts32-644Package 13<br>Name: utranCellHandoverPackage<br>OID ts32-644Package 2<br>Name: utranCellHandoverPackageR0600<br>OID : ts32-644Package 20600 |
| utranRelationBasicPackage | Name: utranRelationBasicPackageR0600<br>OID : ts32-644Package 30600 | Name: utranRelationBasicPackage<br>OID : ts32-644Package 3 |
| utranRelationAssociationPackage | Name: utranRelationAssociationPackage<br>OID ts32-644Package 4 | -- |

| | | |
|---|---|---|
| externalUtranCellPackage | Name: externalUtranCellPackageR0630<br>OID : ts32-644Package 50630 | Name: externalUtranCellPackageR0506<br>OID : ts32-644Package 50506<br>Name: externalUtranCellPackage<br>OID : ts32-644Package 5<br>Name: externalUtranCellPackageR0600<br>OID : ts32-644Package 50600 |
| rncFunctionBasicPackage | Name: rncFunctionBasicPackage<br>OID : ts32-644Package 6 | -- |
| utranCellBasicPackage | Name: utranCellBasicPackage<br>OID : ts32-644Package 7 | -- |
| utranCellAssociationPackage | Name: utranCellAssociationPackage<br>OID : ts32-644Package 8 | -- |
| utranCellRetPackage | Name: utranCellRetPackageR0610<br>OID : ts32-644Package 210610 | |
| iubLinkBasicPackage | Name: iubLinkBasicPackage<br>OID : ts32-644Package 9 | -- |
| iubLinkAssociationPackage | Name: iubLinkAssociationPackage<br>OID : ts32-644Package 10 | -- |
| nodeBFunctionBasicPackage | Name: nodeBFunctionBasicPackage<br>OID : ts32-644Package 11 | -- |
| nodeBFunctionAssociationPackage | Name: nodeBFunctionAssociationPackage<br>OID : ts32-644Package 12 | -- |
| utranFDDCellHandoverPackage | Name: utranFDDCellHandoverPackageR630<br>OID : ts32-644Package 130630 | Name: utranFDDCellHandoverPackage<br>OID : ts32-644Package 130600 |
| utran1-28McpsTDDCellHandoverPackage | Name: utran1-28McpsTDDCellHandoverPackageR630<br>OID : ts32-644Package 140630 | Name: utran1-28McpsTDDCellHandoverPackage<br>OID : ts32-644Package 140600 |
| utran3-84McpsTDDCellHandoverPackage | Name: utran3-84McpsTDDCellHandoverPackageR630<br>OID : ts32-644Package 150630 | Name: utran3-84McpsTDDCellHandoverPackage<br>OID : ts32-644Package 150600 |
| utranRelationFDDHandoverPackage | Name: utranRelationFDDHandoverPackageR630<br>OID : ts32-644Package 160630 | Name: utranRelationFDDHandoverPackage<br>OID : ts32-644Package 160600 |
| utranRelationTDDHandoverPackage | Name: utranRelationTDDHandoverPackageR630<br>OID : ts32-644Package 170630 | Name: utranRelationTDDHandoverPackage<br>OID : ts32-644Package 170600 |
| externalUtranFDDCellHandoverPackage | Name: externalUtranFDDCellHandoverPackageR630<br>OID : ts32-644Package 180630 | Name: externalUtranFDDCellHandoverPackage<br>OID : ts32-644Package 180600 |
| externalUtranTDDCellHandoverPackage | Name: externalUtranTDDCellHandoverPackageR630<br>OID : ts32-644Package 190630 | Name: externalUtranTDDCellHandoverPackage<br>OID : ts32-644Package 190600 |
| iubLink2aTMChannelTerminationPointAssociationPackage | Name: iubLink2aTMChannelTerminationPointAssociationPackage<br>OID : ts32-644Package 200600 | -- |
| antennaFunctionBasicPackage | Name: antennaFunctionBasicPackageR0610<br>OID : ts32-644Package 220610 | -- |
| antennaFunctionOptionalPackage | Name: antennaFunctionOptionalPackageR0630<br>OID : ts32-644Package 230630 | Name: antennaFunctionOptionalPackageR0610<br>OID : ts32-644Package 230610 |
| externalUtranCellAssociationPackage | Name: externalUtranCellAssociationPackage<br>OID : ts32-644Package 240620 | -- |
| externalRncFunctionBasicPackage | Name: externalRncFunctionBasicPackage<br>OID : ts32-644Package 250620 | -- |
| externalRncFunctionAssociationPackage | Name: externalRncFunctionAssociationPackage<br>OID : ts32-644Package 260620 | -- |
| **Actions** | | |
| | | |
| **Notifications** | | |
| | | |
| **Attributes** | | |
| Mcc | Name: mcc<br>OID : ts32-644Attribute 1 | -- |
| Mnc | Name: mnc<br>OID : ts32-644Attribute 2 | -- |
| rncId | Name: rncIdR55<br>OID : ts32-644Attribute 31 | Name: rncId<br>OID : ts32-644Attribute 3 |
| cId | Name: cIdR55<br>OID : ts32-644Attribute 32 | Name: cId<br>OID : ts32-644Attribute 4 |
| localCellId | Name: localCellIdR55<br>OID : ts32-644Attribute 33 | Name: localCellId<br>OID : ts32-644Attribute 5 |

| | | |
|---|---|---|
| uarfcnUl | Name: uarfcnUlR630<br>OID : ts32-644Attribute 60630 | Name: uarfcnUl<br>OID : ts32-644Attribute 6 |
| uarfcnDl | Name: uarfcnDlR630<br>OID : ts32-644Attribute 70630 | Name: uarfcnDl<br>OID : ts32-644Attribute 7 |
| primaryScramblingCode | Name: primaryScramblingCodeR630<br>OID : ts32-644Attribute 80630 | Name: primaryScramblingCode<br>OID : ts32-644Attribute 8 |
| primaryCpichPower | Name: primaryCpichPowerR630<br>OID : ts32-644Attribute 90630 | Name: primaryCpichPower<br>OID : ts32-644Attribute 9 |
| maximumTransmissionPower | Name: maximumTransmissionPower<br>OID : ts32-644Attribute 10 | -- |
| primarySchPower | Name: primarySchPowerR630<br>OID : ts32-644Attribute 110630 | Name: primarySchPower<br>OID : ts32-644Attribute 11 |
| secondarySchPower | Name: secondarySchPowerR630<br>OID : ts32-644Attribute 120630 | Name: secondarySchPower<br>OID : ts32-644Attribute 12 |
| bchPower | Name: bchPowerR630<br>OID : ts32-644Attribute 130630 | Name: bchPower<br>OID : ts32-644Attribute 13 |
| Lac | Name: lacR630<br>OID : ts32-644Attribute 140630 | Name: lac<br>OID : ts32-644Attribute 14 |
| Rac | Name: racR630<br>OID : ts32-644Attribute 150630 | Name: rac<br>OID : ts32-644Attribute 15 |
| Sac | Name: sacR630<br>OID : ts32-644Attribute 160630 | Name: sac<br>OID : ts32-644Attribute 16 |
| Ura | -- | Name: ura<br>OID : ts32-644Attribute 17 |
| utranRelationId | Name: utranRelationId<br>OID : ts32-644Attribute 18 | -- |
| relationType | -- | Name: relationType<br>OID : ts32-644Attribute 19 |
| adjacentCell | Name: adjacentCell<br>OID : ts32-644Attribute 20 | -- |
| externalUtranCellId | Name: externalUtranCellIdR630<br>OID : ts32-644Attribute 210630 | Name: externalUtranCellId<br>OID : ts32-644Attribute 21 |
| rncFunctionId | Name: rncFunctionId<br>OID : ts32-644Attribute 22 | -- |
| utranCellId | Name: utranCellId<br>OID : ts32-644Attribute 23 | -- |
| utranCell2iubLink | Name: utranCell2iubLink<br>OID : ts32-644Attribute 24 | -- |
| iubLinkId | Name: iubLinkId<br>OID : ts32-644Attribute 25 | -- |
| iubLink2nodeBFunction | Name: iubLink2nodeBFunction<br>OID : ts32-644Attribute 26 | -- |
| iubLink2utranCell | Name: iubLink2utranCell<br>OID : ts32-644Attribute 27 | -- |
| nodeBFunctionId | Name: nodeBFunctionId<br>OID : ts32-644Attribute 28 | -- |
| nodeB2iubLink | Name: nodeB2iubLink<br>OID : ts32-644Attribute 29 | -- |
| uraList | Name: uraListR630<br>OID : ts32-644Attribute 300630 | Name: uraList<br>OID : ts32-644Attribute 30 |
| Uarfcn | Name: uarfcnR630<br>OID : ts32-644Attribute 310630 | Name: uarfcn<br>OID : ts32-644Attribute 310600 |
| cellParameterId | Name: cellParameterId<br>OID : ts32-644Attribute 320600 | -- |
| primaryCcpchPower | Name: primaryCcpchPower<br>OID : ts32-644Attribute 330600 | -- |
| dwPchPower | Name: dwPchPower<br>OID : ts32-644Attribute 340600 | -- |
| timeSlotList | Name: timeSlotList<br>OID : ts32-644Attribute 350600 | -- |
| schPower | Name: schPower<br>OID : ts32-644Attribute 360600 | -- |
| cellMode | Name: cellMode<br>OID : ts32-644Attribute 370600 | -- |
| iubLink2aTMChannelTerminationPoint | Name: iubLink2aTMChannelTerminationPoint<br>OID : ts32-644Attribute 380600 | -- |
| retAntennaFunctionList | Name: retAntennaFunctionListR0610<br>OID : ts32-644Attribute 390610 | -- |
| antennaFunctionId | Name: antennaFunctionIdR0610<br>OID : ts32-644Attribute 400610 | -- |

| | | |
|---|---|---|
| retUtranCellList | Name: retUtranCellListR0610<br>OID : ts32-644Attribute 410610 | -- |
| retTiltValue | Name: retTiltValueR0610<br>OID : ts32-644Attribute 420610 | -- |
| maxTiltValue | Name: maxTiltValueR0610<br>OID : ts32-644Attribute 440610 | -- |
| minTiltValue | Name: minTiltValueR0610<br>OID : ts32-644Attribute 450610 | -- |
| mechanicalOffset | Name: mechanicalOffsetR0610<br>OID : ts32-644Attribute 460610 | -- |
| retGroupName | Name: retGroupNameR0610<br>OID : ts32-644Attribute 470610 | -- |
| height | Name: heightR0610<br>OID : ts32-644Attribute 480610 | -- |
| controllingRnc | Name: controllingRnc<br>OID : ts32-644Attribute 490620 | -- |
| controlledCellList | Name: controlledCellList<br>OID : ts32-644Attribute 500620 | -- |
| externalRncFunctionId | Name: externalRncFunctionId<br>OID : ts32-644Attribute 510620 | -- |
| bearing | Name: bearing<br>OID : ts32-644Attribute 520630 | -- |
| baseElevation | Name: baseElevation<br>OID : ts32-644Attribute 530630 | -- |
| latitude | Name: latitude<br>OID : ts32-644Attribute 540630 | -- |
| longitude | Name: longitude<br>OID : ts32-644Attribute 550630 | -- |
| maxAzimuthValue | Name: maxAzimuthValue<br>OID : ts32-644Attribute 560630 | -- |
| minAzimuthValue | Name: minAzimuthValue<br>OID : ts32-644Attribute 570630 | -- |
| horizBeamwidth | Name: horizBeamwidth<br>OID : ts32-644Attribute 580630 | -- |
| vertBeamwidth | Name: vertBeamwidth<br>OID : ts32-644Attribute 590630 | -- |
| patternLabel | Name: patternLabel<br>OID : ts32-644Attribute 600630 | -- |
| **Parameters** | | |
| | | |
| **Name Bindings** | | |
| rncFunction-managedElement | Name: rncFunctionR55-managedElement<br>OID : ts32-644NameBinding 15 | Name: rncFunction-managedElement<br>OID : ts32-644NameBinding 1 |
| nodeBFunction-managedElement | Name: nodeBFunction-managedElement<br>OID : ts32-644NameBinding 2 | -- |
| utranCell-rncFunction | Name: utranCellR0630-rncFunctionR55<br>OID : ts32-644NameBinding 30630 | Name: utranCellR55-rncFunctionR55<br>OID : ts32-644NameBinding 17<br>Name: utranCellR54-rncFunction<br>OID : ts32-644NameBinding 12<br>Name: utranCell-rncFunction<br>OID : ts32-644NameBinding 3<br>Name: utranCellR0600-rncFunctionR55<br>OID : ts32-644NameBinding 30600<br>Name: utranCellR0610-rncFunctionR55<br>OID : ts32-644NameBinding 30610 |

| | | |
|---|---|---|
| utranRelation-utranCell | Name: utranRelationR0630-utranCellR0630<br>OID : ts32-644NameBinding 40630 | Name: utranRelation-utranCellR55<br>OID : ts32-644NameBinding 18<br>Name: utranRelation-utranCellR54<br>OID : ts32-644NameBinding 13<br>Name: utranRelation-utranCell<br>OID : ts32-644NameBinding 4<br>Name: utranRelationR0600-utranCellR0600<br>OID : ts32-644NameBinding 40600<br>Name: utranRelationR0600-utranCellR0610<br>OID : ts32-644NameBinding 40610 |
| externalUtranCell - subNetwork | Name: externalUtranCellR0630-subNetworkR60<br>OID : ts32-644NameBinding 50630 | Name: externalUtranCellR0506-subNetwork<br>OID : ts32-644NameBinding 50506<br>Name: externalUtranCell-subNetwork<br>OID : ts32-644NameBinding 5<br>Name: externalUtranCellR0600-subNetwork<br>OID : ts32-644NameBinding 50600<br>Name: externalUtranCellR0600-subNetworkR60<br>OID : ts32-644NameBinding 50620 |
| vsDataContainer-rncFunction | -- | Name: vsDataContainer-rncFunction<br>OID : ts32-644NameBinding 6 |
| vsDataContainer-nodeBFunction | -- | Name: vsDataContainer-nodeBFunction<br>OID : ts32-644NameBinding 7 |
| vsDataContainer-utranCell | -- | Name: vsDataContainer-utranCell<br>OID : : ts32-644NameBinding 8 |
| vsDataContainer-utranRelation | -- | Name: vsDataContainer-utranRelation<br>OID : ts32-644NameBinding 9 |
| iubLink-rncFunction | Name: iubLinkR0600-rncFunctionR55<br>OID : ts32-644NameBinding 100600 | Name: iubLink-rncFunctionR55<br>OID : ts32-644NameBinding 16<br>Name: iubLink-rncFunction<br>OID : ts32-644NameBinding 10 |
| gsmRelation-utranCell | Name: gsmRelation-utranCellR0630<br>OID : ts32-644NameBinding 110630 | Name: gsmRelation-utranCellR55<br>OID : ts32-644NameBinding 19<br>Name: gsmRelation-utranCellR54<br>OID : ts32-644NameBinding 14<br>Name: gsmRelation-utranCell<br>OID : ts32-644NameBinding 11<br>Name: gsmRelation-utranCellR0600<br>OID : ts32-644NameBinding 110600<br>Name: gsmRelation-utranCellR0610<br>OID : ts32-644NameBinding 110610 |
| antennaFunction-managedElement | Name: antennaFunctionR0630-managedElement<br>OID : ts32-644NameBinding 200630 | Name: antennaFunctionR0610-managedElement<br>OID : ts32-644NameBinding 200610 |
| externalRncFunction-subNetwork | Name: externalRncFunction-subNetworkR60<br>OID : ts32-644NameBinding 130620 | -- |

# Annex B (informative): Change history

| Change history | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Date** | **TSG #** | **TSG Doc.** | **CR** | **Rev** | **Subject/Comment** | **Cat** | **Old** | **New** |
| Jun 2001 | SA_12 | SP-010283 | -- | -- | Approved at TSG SA #12 and placed under Change Control | -- | 2.0.0 | 4.0.0 |
| Sep 2001 | SA_13 | SP-010478 | 0001 | -- | Correction due to TS renumbering | F | 4.0.0 | 4.1.0 |
| Sep 2002 | -- | -- | -- | -- | Cosmetics/Styles | -- | 4.1.0 | 4.1.1 |
| Dec 2002 | SA_18 | SP-020749 | 0007 | -- | Alignment of the CMIP SS with the Rel-5 version of the IS in 32.642 | F | 4.1.1 | 5.0.0 |
| Jun 2003 | SA_20 | SP-030283 | 0003 | -- | Removal of relationType | A | 5.0.0 | 5.1.0 |
| Sep 2003 | SA_21 | SP-030420 | 0004 | -- | Correction of wrong attribute name | F | 5.1.0 | 5.2.0 |
| Dec 2003 | SA_22 | SP-030646 | 0009 | -- | Correction of the number of possible URAs from 1 to 8 | A | 5.2.0 | 5.3.0 |
| Dec 2003 | SA_22 | SP-030642 | 0010 | -- | Add notifications to functional objects - Align with 32.642 (IS) | F | 5.2.0 | 5.3.0 |
| Mar 2004 | SA_23 | SP-040132 | 0011 | -- | Correction of OIDs of the MOCs, packages and attributes affected by the change from ura to uraList | F | 5.3.0 | 5.4.0 |
| Jun 2004 | SA_24 | SP-040255 | 0012 | -- | Correction of type of the attributes cId, localCellId and rncId | F | 5.4.0 | 5.5.0 |
| Jun 2004 | SA_24 | SP-040254 | 0013 | -- | The specification does not support all UMTS frequency bands | F | 5.4.0 | 5.5.0 |
| Sep 2004 | SA_25 | SP-040591 | 0014 | -- | Correction of the types of the attributes cId, localCellId and rncId | F | 5.5.0 | 5.6.0 |
| Dec 2004 | SA_26 | SP-040810 | 0015 | -- | Add support for the TDD mode, the state change notification and ATM management – Align with 32.642 | B | 5.6.0 | 6.0.0 |
| Mar 2005 | SA_27 | SP-050048 | 0016 | -- | Add RET support – Align with 32.642 Configuration Management UTRAN network resources IRP NRM | F | 6.0.0 | 6.1.0 |
| Jun 2005 | SA_28 | SP-050297 | 0017 | -- | Add ExternalRncFunction Object Class - Align with the IS in TS 32.622 | F | 6.1.0 | 6.2.0 |
| Sep 2006 | SA_33 | SP-060537 | 0018 | -- | Add missing RET Antenna Functionality to the CMIP Solution Set - Align with 32.642 UTRAN network resources IRP Network Resource Model | F | 6.2.0 | 6.3.0 |
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# History

| Document history | | |
|---|---|---|
| V6.0.0 | December 2004 | Publication |
| V6.1.0 | March 2005 | Publication |
| V6.2.0 | June 2005 | Publication |
| V6.3.0 | September 2006 | Publication |
| | | |