

3GPP TS 32.644 V6.3.0 (2006-09)

Technical Specification

**3rd Generation Partnership Project;
Technical Specification Group Services and System Aspects;
Telecommunication management;
Configuration Management (CM);
UTRAN network resources Integration Reference Point (IRP):
Common Management Information Protocol (CMIP)
Solution Set (SS)
(Release 6)**



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Keywords

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Foreword

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

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

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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
rnclId	rnclIdR55	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
cld	cldR55	M	M	M
localCellId	localCellIdR55	M	M	M
uarfcnDI	uarfcnDIR630	O	M	M
uarfcnUI	uarfcnUIR630	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	--
uarfcnUI	uarfcnUIR630	O	M	--
uarfcnDI	uarfcnDIR630	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
cld	cldR55	M	M	M
mcc	mcc	M	M	M
mnc	mnc	M	M	M
rncl	rnclR55	M	M	M
cellMode	cellMode	M	M	--
uarfcnUI	uarfcnUIR630	O	M	M
uarfcnDI	uarfcnDIR630	O	M	M
primaryScramblingCode	primaryScramblingCodeR630	O	M	M
primaryCpichPower	primaryCpichPowerR630	O	M	M
uarfcn	uarfcnR630	O	M	M
cellParameterId	cellParameterId	O	M	M
primaryCpochPower	primaryCpochPower	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
rncl	rnclR55	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

```
uarfcnU1R630        GET,
uarfcnD1R630        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

```
uarfcnU1R630        GET-REPLACE,
uarfcnD1R630        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 externalRncFunction.";

-- 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 externalRncFunction.";

-- 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 uarfcnDI

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 DNSs..";
```

-- 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 - rncFunctionutranCellR0630-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 - utranCellutranRelationR0630-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 - subNetworkexternalUtranCellR0630-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: mcFunctionR55 OID : ts32-644ObjectClass 8	Name: mcFunction OID : ts32-644ObjectClass 1
utranCell	Name: utranCellR0630 OID : ts32-644ObjectClass 20630	Name: utranCellR55 OID : ts32-644ObjectClass 9 Name: utranCellR54 OID : ts32-644ObjectClass 7 Name: utranCell OID : ts32-644ObjectClass 2 Name: utranCellR0600 OID : ts32-644ObjectClass 20600 Name: utranCellR0610 OID : ts32-644ObjectClass 20610
utranRelation	Name: utranRelationR0630 OID : ts32-644ObjectClass 30630	Name: utranRelation OID : ts32-644ObjectClass 3 Name: utranRelationR0600 OID : ts32-644ObjectClass 30600
externalUtranCell	Name: externalUtranCellR0630 OID : ts32-644ObjectClass 40630	Name: externalUtranCellR0506 OID : ts32-644ObjectClass 40506 Name: externalUtranCell OID : ts32-644ObjectClass 4 Name: externalUtranCellR0600 OID : ts32-644ObjectClass 40600 Name: externalUtranCellR0620 OID : ts32-644ObjectClass 40620
iubLink	Name: iubLinkR0600 OID : ts32-644ObjectClass 50600	Name: iubLink OID : ts32-644ObjectClass
nodeBFunction	Name: nodeBFunction OID : ts32-644ObjectClass 6	--
antennaFunction	Name: antennaFunctionR0630 OID : ts32-644ObjectClass 70630	Name: antennaFunctionR0610 OID : ts32-644ObjectClass 70610
externalRncFunction	Name: externalRncFunction OID : ts32-644ObjectClass 80620	--
Packages		
rncFunctionHandoverPackage	Name: mcFunctionHandoverPackageR55 OID : ts32-644Package 14	Name: mcFunctionHandoverPackage OID : ts32-644Package 1
utranCellHandoverPackage	Name: utranCellHandoverPackageR0630 OID : ts32-644Package 20630	Name: utranCellHandoverPackageR55 OID : ts32-644Package 15 Name: utranCellHandoverPackageR54 OID : ts32-644Package 13 Name: utranCellHandoverPackage OID : ts32-644Package 2 Name: utranCellHandoverPackageR0600 OID : ts32-644Package 20600
utranRelationBasicPackage	Name: utranRelationBasicPackageR0600 OID : ts32-644Package 30600	Name: utranRelationBasicPackage OID : ts32-644Package 3
utranRelationAssociationPackage	Name: utranRelationAssociationPackage OID : ts32-644Package 4	--

externalUtranCellPackage	Name: externalUtranCellPackageR0630 OID : ts32-644Package 50630	Name: externalUtranCellPackageR0506 OID : ts32-644Package 50506 Name: externalUtranCellPackage OID : ts32-644Package 5 Name: externalUtranCellPackageR0600 OID : ts32-644Package 50600
rncFunctionBasicPackage	Name: mcFunctionBasicPackage OID : ts32-644Package 6	--
utranCellBasicPackage	Name: utranCellBasicPackage OID : ts32-644Package 7	--
utranCellAssociationPackage	Name: utranCellAssociationPackage OID : ts32-644Package 8	--
utranCellRetPackage	Name: utranCellRetPackageR0610 OID : ts32-644Package 210610	--
iubLinkBasicPackage	Name: iubLinkBasicPackage OID : ts32-644Package 9	--
iubLinkAssociationPackage	Name: iubLinkAssociationPackage OID : ts32-644Package 10	--
nodeBFunctionBasicPackage	Name: nodeBFunctionBasicPackage OID : ts32-644Package 11	--
nodeBFunctionAssociationPackage	Name: nodeBFunctionAssociationPackage OID : ts32-644Package 12	--
utranFDDCellHandoverPackage	Name: utranFDDCellHandoverPackageR630 OID : ts32-644Package 130630	Name: utranFDDCellHandoverPackage OID : ts32-644Package 130600
utran1-28McpsTDDCellHandoverPackage	Name: utran1-28McpsTDDCellHandoverPackageR630 OID : ts32-644Package 140630	Name: utran1-28McpsTDDCellHandoverPackage OID : ts32-644Package 140600
utran3-84McpsTDDCellHandoverPackage	Name: utran3-84McpsTDDCellHandoverPackageR630 OID : ts32-644Package 150630	Name: utran3-84McpsTDDCellHandoverPackage OID : ts32-644Package 150600
utranRelationFDDHandoverPackage	Name: utranRelationFDDHandoverPackageR630 OID : ts32-644Package 160630	Name: utranRelationFDDHandoverPackage OID : ts32-644Package 160600
utranRelationTDDHandoverPackage	Name: utranRelationTDDHandoverPackageR630 OID : ts32-644Package 170630	Name: utranRelationTDDHandoverPackage OID : ts32-644Package 170600
externalUtranFDDCellHandoverPackage	Name: externalUtranFDDCellHandoverPackageR630 OID : ts32-644Package 180630	Name: externalUtranFDDCellHandoverPackage OID : ts32-644Package 180600
externalUtranTDDCellHandoverPackage	Name: externalUtranTDDCellHandoverPackageR630 OID : ts32-644Package 190630	Name: externalUtranTDDCellHandoverPackage OID : ts32-644Package 190600
iubLink2aTMChannelTerminationPointAssociationPackage	Name: iubLink2aTMChannelTerminationPointAssociationPackage OID : ts32-644Package 200600	--
antennaFunctionBasicPackage	Name: antennaFunctionBasicPackageR0610 OID : ts32-644Package 220610	--
antennaFunctionOptionalPackage	Name: antennaFunctionOptionalPackageR0630 OID : ts32-644Package 230630	Name: antennaFunctionOptionalPackageR0610 OID : ts32-644Package 230610
externalUtranCellAssociationPackage	Name: externalUtranCellAssociationPackage OID : ts32-644Package 240620	--
externalRncFunctionBasicPackage	Name: externalRncFunctionBasicPackage OID : ts32-644Package 250620	--
externalRncFunctionAssociationPackage	Name: externalRncFunctionAssociationPackage OID : ts32-644Package 260620	--
Actions		
Notifications		
Attributes		
Mcc	Name: mcc OID : ts32-644Attribute 1	--
Mnc	Name: mnc OID : ts32-644Attribute 2	--
rncId	Name: mcdR55 OID : ts32-644Attribute 31	Name: mcd OID : ts32-644Attribute 3
cId	Name: cidR55 OID : ts32-644Attribute 32	Name: cid OID : ts32-644Attribute 4
localCellId	Name: localCellIdR55 OID : ts32-644Attribute 33	Name: localCellId OID : ts32-644Attribute 5

uarfcnU1	Name: uarfcnU1R630 OID : ts32-644Attribute 60630	Name: uarfcnU1 OID : ts32-644Attribute 6
uarfcnD1	Name: uarfcnD1R630 OID : ts32-644Attribute 70630	Name: uarfcnD1 OID : ts32-644Attribute 7
primaryScramblingCode	Name: primaryScramblingCodeR630 OID : ts32-644Attribute 80630	Name: primaryScramblingCode OID : ts32-644Attribute 8
primaryCpichPower	Name: primaryCpichPowerR630 OID : ts32-644Attribute 90630	Name: primaryCpichPower OID : ts32-644Attribute 9
maximumTransmissionPower	Name: maximumTransmissionPower OID : ts32-644Attribute 10	--
primarySchPower	Name: primarySchPowerR630 OID : ts32-644Attribute 110630	Name: primarySchPower OID : ts32-644Attribute 11
secondarySchPower	Name: secondarySchPowerR630 OID : ts32-644Attribute 120630	Name: secondarySchPower OID : ts32-644Attribute 12
bchPower	Name: bchPowerR630 OID : ts32-644Attribute 130630	Name: bchPower OID : ts32-644Attribute 13
Lac	Name: lacR630 OID : ts32-644Attribute 140630	Name: lac OID : ts32-644Attribute 14
Rac	Name: racR630 OID : ts32-644Attribute 150630	Name: rac OID : ts32-644Attribute 15
Sac	Name: sacR630 OID : ts32-644Attribute 160630	Name: sac OID : ts32-644Attribute 16
Ura	--	Name: ura OID : ts32-644Attribute 17
utranRelationId	Name: utranRelationId OID : ts32-644Attribute 18	--
relationType	--	Name: relationType OID : ts32-644Attribute 19
adjacentCell	Name: adjacentCell OID : ts32-644Attribute 20	--
externalUtranCellId	Name: externalUtranCellIdR630 OID : ts32-644Attribute 210630	Name: externalUtranCellId OID : ts32-644Attribute 21
rncFunctionId	Name: mcFunctionId OID : ts32-644Attribute 22	--
utranCellId	Name: utranCellId OID : ts32-644Attribute 23	--
utranCell2iubLink	Name: utranCell2iubLink OID : ts32-644Attribute 24	--
iubLinkId	Name: iubLinkId OID : ts32-644Attribute 25	--
iubLink2nodeBFunction	Name: iubLink2nodeBFunction OID : ts32-644Attribute 26	--
iubLink2utranCell	Name: iubLink2utranCell OID : ts32-644Attribute 27	--
nodeBFunctionId	Name: nodeBFunctionId OID : ts32-644Attribute 28	--
nodeB2iubLink	Name: nodeB2iubLink OID : ts32-644Attribute 29	--
uraList	Name: uraListR630 OID : ts32-644Attribute 300630	Name: uraList OID : ts32-644Attribute 30
Uarfcn	Name: uarfcnR630 OID : ts32-644Attribute 310630	Name: uarfcn OID : ts32-644Attribute 310600
cellParameterId	Name: cellParameterId OID : ts32-644Attribute 320600	--
primaryCpchPower	Name: primaryCpchPower OID : ts32-644Attribute 330600	--
dwPchPower	Name: dwPchPower OID : ts32-644Attribute 340600	--
timeSlotList	Name: timeSlotList OID : ts32-644Attribute 350600	--
schPower	Name: schPower OID : ts32-644Attribute 360600	--
cellMode	Name: cellMode OID : ts32-644Attribute 370600	--
iubLink2aTMChannelTerminationPoint	Name: iubLink2aTMChannelTerminationPoint OID : ts32-644Attribute 380600	--
retAntennaFunctionList	Name: retAntennaFunctionListR0610 OID : ts32-644Attribute 390610	--
antennaFunctionId	Name: antennaFunctionIdR0610 OID : ts32-644Attribute 400610	--

retUtranCellList	Name: retUtranCellListR0610 OID : ts32-644Attribute 410610	--
retTilt Value	Name: retTilt ValueR0610 OID : ts32-644Attribute 420610	--
maxTilt Value	Name: maxTilt ValueR0610 OID : ts32-644Attribute 440610	--
minTilt Value	Name: minTilt ValueR0610 OID : ts32-644Attribute 450610	--
mechanicalOffset	Name: mechanicalOffsetR0610 OID : ts32-644Attribute 460610	--
retGroupName	Name: retGroupNameR0610 OID : ts32-644Attribute 470610	--
height	Name: heightR0610 OID : ts32-644Attribute 480610	--
controllingRnc	Name: controllingRnc OID : ts32-644Attribute 490620	--
controlledCellList	Name: controlledCellList OID : ts32-644Attribute 500620	--
externalRncFunctionId	Name: externalRncFunctionId OID : ts32-644Attribute 510620	--
bearing	Name: bearing OID : ts32-644Attribute 520630	--
baseElevation	Name: baseElevation OID : ts32-644Attribute 530630	--
latitude	Name: latitude OID : ts32-644Attribute 540630	--
longitude	Name: longitude OID : ts32-644Attribute 550630	--
maxAzimuth Value	Name: maxAzimuth Value OID : ts32-644Attribute 560630	--
minAzimuth Value	Name: minAzimuth Value OID : ts32-644Attribute 570630	--
horizBeamwidth	Name: horizBeamwidth OID : ts32-644Attribute 580630	--
vertBeamwidth	Name: vertBeamwidth OID : ts32-644Attribute 590630	--
patternLabel	Name: patternLabel OID : ts32-644Attribute 600630	--
Parameters		
Name Bindings		
rncFunction-managedElement	Name: mcFunctionR55-managedElement OID : ts32-644NameBinding 15	Name: mcFunction-managedElement OID : ts32-644NameBinding 1
nodeBFunction-managedElement	Name: nodeBFunction-managedElement OID : ts32-644NameBinding 2	--
utranCell-mcFunction	Name: utranCellR0630-rncFunctionR55 OID : ts32-644NameBinding 30630	Name: utranCellR55-mcFunctionR55 OID : ts32-644NameBinding 17 Name: utranCellR54-mcFunction OID : ts32-644NameBinding 12 Name: utranCell-mcFunction OID : ts32-644NameBinding 3 Name: utranCellR0600-rncFunctionR55 OID : ts32-644NameBinding 30600 Name: utranCellR0610-rncFunctionR55 OID : ts32-644NameBinding 30610

utranRelation-utranCell	Name: utranRelationR0630-utranCellR0630 OID : ts32-644NameBinding 40630	Name: utranRelation-utranCellR55 OID : ts32-644NameBinding 18 Name: utranRelation-utranCellR54 OID : ts32-644NameBinding 13 Name: utranRelation-utranCell OID : ts32-644NameBinding 4 Name: utranRelationR0600-utranCellR0600 OID : ts32-644NameBinding 40600 Name: utranRelationR0600-utranCellR0610 OID : ts32-644NameBinding 40610
externalUtranCell - subNetwork	Name: externalUtranCellR0630-subNetworkR60 OID : ts32-644NameBinding 50630	Name: externalUtranCellR0506-subNetwork OID : ts32-644NameBinding 50506 Name: externalUtranCell-subNetwork OID : ts32-644NameBinding 5 Name: externalUtranCellR0600-subNetwork OID : ts32-644NameBinding 50600 Name: externalUtranCellR0600-subNetworkR60 OID : ts32-644NameBinding 50620
vsDataContainer-mcFunction	--	Name: vsDataContainer-mcFunction OID : ts32-644NameBinding 6
vsDataContainer-nodeBFunction	--	Name: vsDataContainer-nodeBFunction OID : ts32-644NameBinding 7
vsDataContainer-utranCell	--	Name: vsDataContainer-utranCell OID : ts32-644NameBinding 8
vsDataContainer-utranRelation	--	Name: vsDataContainer-utranRelation OID : ts32-644NameBinding 9
iubLink-mcFunction	Name: iubLinkR0600-rncFunctionR55 OID : ts32-644NameBinding 100600	Name: iubLink-mcFunctionR55 OID : ts32-644NameBinding 16 Name: iubLink-mcFunction OID : ts32-644NameBinding 10
gsmRelation-utranCell	Name: gsmRelation-utranCellR0630 OID : ts32-644NameBinding 110630	Name: gsmRelation-utranCellR55 OID : ts32-644NameBinding 19 Name: gsmRelation-utranCellR54 OID : ts32-644NameBinding 14 Name: gsmRelation-utranCell OID : ts32-644NameBinding 11 Name: gsmRelation-utranCellR0600 OID : ts32-644NameBinding 110600 Name: gsmRelation-utranCellR0610 OID : ts32-644NameBinding 110610
antennaFunction-managedElement	Name: antennaFunctionR0630-managedElement OID : ts32-644NameBinding 200630	Name: antennaFunctionR0610-managedElement OID : ts32-644NameBinding 200610
externalRncFunction-subNetwork	Name: externalRncFunction-subNetworkR60 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 cld, localCellId and rncld	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 cld, localCellId and rncld	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