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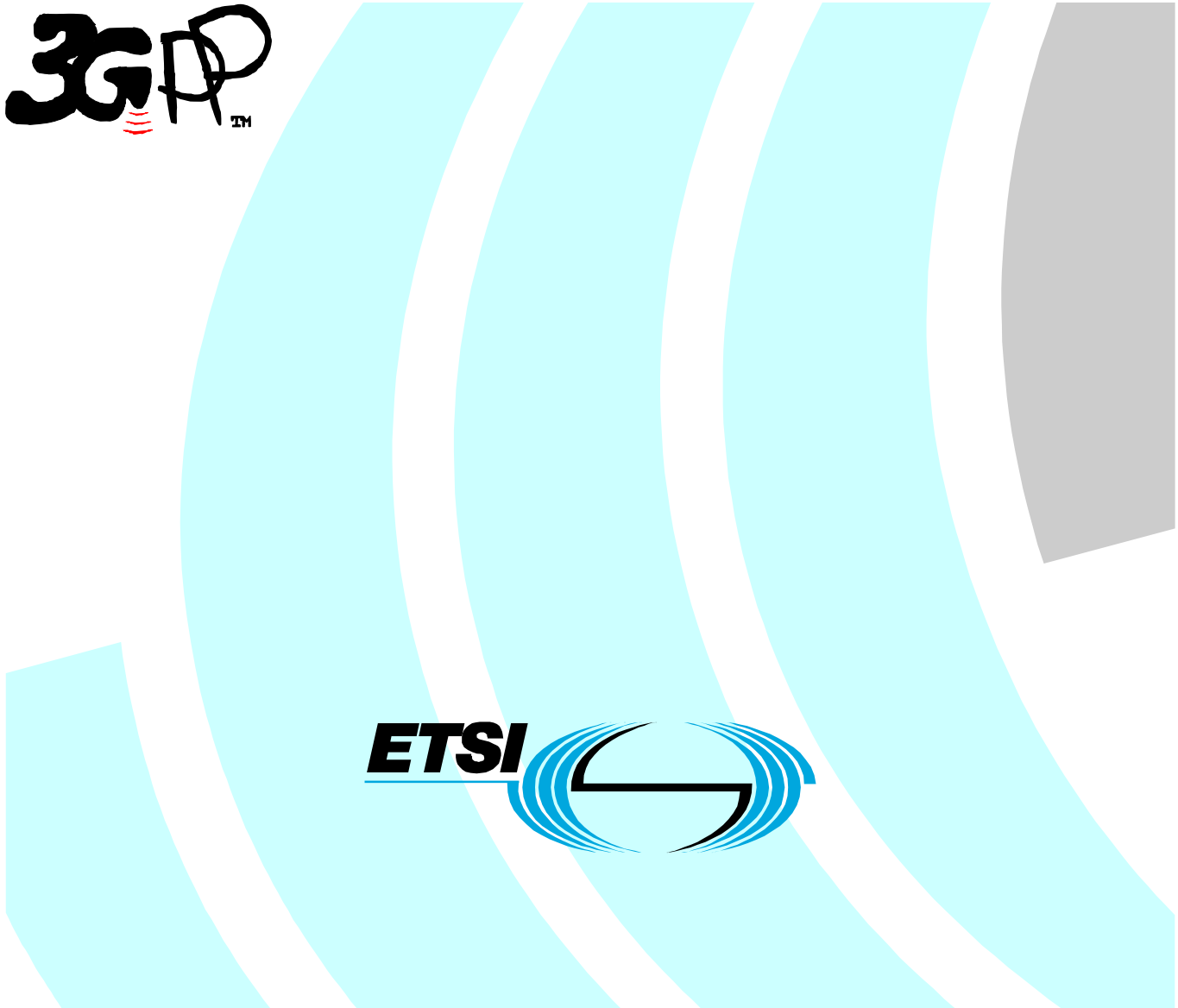
Technical Specification

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 6.1.0 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).

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 V6.3.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	utranCellR0610
IubLink	iubLinkR0600
UtranRelation	utranRelationR0600
ExternalUtranCell	externalUtranCellR0600
AntennaFunction	antennaFunctionR0610

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	uarfcnDl	O	M	M
uarfcnUl	uarfcnUl	O	M	M
primaryScramblingCode	primaryScramblingCode	O	M	M
primaryCpichPower	primaryCpichPower	O	M	M
retAntennaFunctionList	retAntennaFunctionListR0610	O	M	M
maximumTransmissionPower	maximumTransmissionPower	M	M	M
primarySchPower	primarySchPower	O	M	M
secondarySchPower	secondarySchPower	O	M	M
bchPower	bchPower	O	M	M
cellMode	cellMode	M	M	--
uarfcn	uarfcn	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	lac	M	M	M
rac	rac	M	M	M
sac	sac	M	M	M
uraList	uraList	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	uarfcnUl	O	M	--
uarfcnDl	uarfcnDl	O	M	--
primaryScramblingCode	primaryScramblingCode	O	M	--
primaryCpichPower	primaryCpichPower	O	M	--
lac	lac	O	M	--
uarfcn	uarfcn	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	externalUtranCellId	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	uarfcnUl	O	M	M
uarfcnDl	uarfcnDl	O	M	M
primaryScramblingCode	primaryScramblingCode	O	M	M
primaryCpichPower	primaryCpichPower	O	M	M
uarfcn	uarfcn	O	M	M
cellParameterId	cellParameterId	O	M	M
primaryCcpchPower	primaryCcpchPower	O	M	M
lac	lac	M	M	M
rac	rac	M	M	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
compassDirection	compassDirectionR0610	O	M	M
maxTiltValue	maxTiltValueR0610	O	M	M
minTiltValue	minTiltValueR0610	O	M	M
mechanicalOffset	mechanicalOffsetR0610	O	M	M
retGroupName	retGroupNameR0610	O	M	M
height	heightR0610	O	M	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	utranCellR0610-rncFunctionR55
utranRelation-utranCell	utranRelationR0600-utranCellR0610
externalUtranCell-subNetwork	externalUtranCellR0600-subNetwork
iubLink-rncFunction	iubLink-rncFunctionR55
gsmRelation-utranCell	gsmRelation-utranCellR0610
antennaFunction-managedElement	antennaFunctionR0610-managedElement

-- 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 Managed Object Classes

-- 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

utranCellR0610 **MANAGED OBJECT CLASS**

DERIVED FROM

"3GPP TS 32.624": managedFunction;

CHARACTERIZED BY

utranCellBasicPackage,

utranCellHandoverPackageR0600,

utranCellAssociationPackage,

"3GPP TS 32.111-4": x721AlarmNotificationsPackage;

CONDITIONAL PACKAGES

utranFDDCellHandoverPackage

PRESENT IF

"FDD handover attributes are supported by an instance of this class.",

utran1-28McpsTDDCellHandoverPackage

PRESENT IF

"1.28 Mcps TDD handover attributes are supported by an instance of this class.",

utran3-84McpsTDDCellHandoverPackage

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 20610};

-- 5.1.3 utranRelation

utranRelationR0600 **MANAGED OBJECT CLASS**

DERIVED FROM

"Rec. X.721 | ISO/IEC 10165-2 : 1992":top;

CHARACTERIZED BY

utranRelationBasicPackageR0600,

utranRelationAssociationPackage;

CONDITIONAL PACKAGES

utranRelationFDDHandoverPackage

PRESENT IF

"FDD handover attributes are supported by an instance of this class.",

utranRelationTDDHandoverPackage

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 30600};

-- 5.1.4 externalUtranCell

externalUtranCellR0600 **MANAGED OBJECT CLASS**

DERIVED FROM

"3GPP TS 32.624": managedFunction;

CHARACTERIZED BY

externalUtranCellPackageR0600;

CONDITIONAL PACKAGES

externalUtranFDDCellHandoverPackage

PRESENT IF

"FDD handover attributes are supported by an instance of this class.",

externalUtranTDDCellHandoverPackage

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 40600};

-- 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

antennaFunctionR0610 **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.",

antennaFunctionOptionalPackageR0610

PRESENT IF

"the optional attributes are supported by an instance of this class.";

REGISTERED AS {ts32-644ObjectClass 70610};

-- 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

utranCellHandoverPackageR0600 **PACKAGE**

BEHAVIOUR

utranCellHandoverPackageR0600Behaviour;

ATTRIBUTES

cIdR55 GET-REPLACE,

localCellIdR55 GET-REPLACE,

maximumTransmissionPower GET-REPLACE,

cellMode GET,

lac GET-REPLACE,

rac GET-REPLACE,

sac GET-REPLACE,

uraList GET-REPLACE;

REGISTERED AS {ts32-644Package 20600};

utranCellHandoverPackageR0600Behaviour **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

externalUtranCellPackageR0600 **PACKAGE**

BEHAVIOUR

externalUtranCellPackageR0600Behaviour;

ATTRIBUTES

externalUtranCellId GET,

cIdR55 GET-REPLACE,

mcc GET-REPLACE,

mnc GET-REPLACE,

rncIdR55 GET-REPLACE,

cellMode GET,

lac GET-REPLACE,

rac GET-REPLACE;

REGISTERED AS {ts32-644Package 50600};

externalUtranCellPackageR0600Behaviour **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

utranFDDCellHandoverPackage **PACKAGE**

BEHAVIOUR

utranFDDCellHandoverPackageBehaviour;

ATTRIBUTES

uarfcnUl GET-REPLACE,

uarfcnDl GET-REPLACE,

primaryScramblingCode GET-REPLACE,

primaryCpichPower GET-REPLACE,

primarySchPower GET-REPLACE,

secondarySchPower GET-REPLACE,

bchPower GET-REPLACE;

REGISTERED AS {ts32-644Package 130600};

utranFDDCellHandoverPackageBehaviour **BEHAVIOUR**

DEFINED AS

"This package contains the attributes of UtranCell required for handover management

in the FDD mode.";

-- 5.2.14 utran1-28McpsTDDCellHandoverPackage

utran1-28McpsTDDCellHandoverPackage **PACKAGE**

BEHAVIOUR

utran1-28McpsTDDCellHandoverPackageBehaviour;

ATTRIBUTES

uarfcn 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

utran3-84McpsTDDCellHandoverPackage **PACKAGE**

BEHAVIOUR

utran3-84McpsTDDCellHandoverPackageBehaviour;

ATTRIBUTES

uarfcn GET-REPLACE,

cellParameterId GET-REPLACE,

primaryCcpchPower GET-REPLACE,

schPower GET-REPLACE,

timeSlotList GET-REPLACE;

REGISTERED AS {ts32-644Package 150600};

utran3-84McpsTDDCellHandoverPackageBehaviour **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

utranRelationFDDHandoverPackage **PACKAGE**

BEHAVIOUR

utranRelationFDDHandoverPackageBehaviour;

ATTRIBUTES

uarfcnUl GET,

uarfcnDl GET,

primaryScramblingCode GET,

primaryCpichPower GET,

lac GET;

REGISTERED AS {ts32-644Package 160600};

utranRelationFDDHandoverPackageBehaviour **BEHAVIOUR**

DEFINED AS

"This package contains the attributes of an utranRelation required for FDD handover management.";

-- 5.2.17 utranRelationTDDHandoverPackage

utranRelationTDDHandoverPackage **PACKAGE**

BEHAVIOUR

utranRelationTDDHandoverPackageBehaviour;

ATTRIBUTES

uarfcn GET,

cellParameterId GET,

primaryCcpchPower GET,

lac GET;

REGISTERED AS {ts32-644Package 170600};

utranRelationTDDHandoverPackageBehaviour **BEHAVIOUR**

DEFINED AS

"This package contains the attributes of an utranRelation required for TDD handover management.";

-- 5.2.18 externalUtranFDDCellHandoverPackage

externalUtranFDDCellHandoverPackage **PACKAGE**

BEHAVIOUR

externalUtranFDDCellHandoverPackageBehaviour;

ATTRIBUTES

uarfcnUl GET-REPLACE,

uarfcnDl GET-REPLACE,

primaryScramblingCode GET-REPLACE,

primaryCpichPower GET-REPLACE;

REGISTERED AS {ts32-644Package 180600};

externalUtranFDDCellHandoverPackageBehaviour **BEHAVIOUR**

DEFINED AS

"This package contains the attributes of externalUtranCell required

for FDD handover management.";

-- 5.2.19 externalUtranTDDCellHandoverPackage

externalUtranTDDCellHandoverPackage **PACKAGE**

BEHAVIOUR

externalUtranTDDCellHandoverPackageBehaviour;

ATTRIBUTES

uarfcn GET-REPLACE,

cellParameterId GET-REPLACE,

primaryCcpchPower GET-REPLACE;

REGISTERED AS {ts32-644Package 190600};

externalUtranTDDCellHandoverPackageBehaviour **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

antennaFunctionOptionalPackageR0610 **PACKAGE**

BEHAVIOUR

antennaFunctionOptionalPackageR0610Behaviour;

ATTRIBUTES

retUtranCellListR0610 GET-REPLACE,

retTiltValueR0610 GET-REPLACE,

compassDirectionR0610 GET-REPLACE,

maxTiltValueR0610 GET-REPLACE,

minTiltValueR0610 GET-REPLACE,

mechanicalOffsetR0610 GET-REPLACE,

retGroupNameR0610 GET-REPLACE,

heightR0610 GET-REPLACE

;

REGISTERED AS {ts32-644Package 230610};

antennaFunctionOptionalPackageR0610Behaviour **BEHAVIOUR**

DEFINED AS

"This package contains the optional attributes of antennaFunction except antennaFunctionId.";

-- 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

uarfcnUl **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.UarfcnUl;

MATCHES FOR

EQUALITY;

BEHAVIOUR

uarfcnUlBehaviour;

REGISTERED AS {ts32-644Attribute 6};

uarfcnUlBehaviour **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

uarfcnDl **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.UarfcnDl;

MATCHES FOR

EQUALITY;

BEHAVIOUR

uarfcnDlBehaviour;

REGISTERED AS {ts32-644Attribute 7};

uarfcnDlBehaviour **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

primaryScramblingCode **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.PrimaryScramblingCode;

MATCHES FOR

EQUALITY;

BEHAVIOUR

primaryScramblingCodeBehaviour;

REGISTERED AS {ts32-644Attribute 8};

primaryScramblingCodeBehaviour **BEHAVIOUR**

DEFINED AS

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

-- 5.3.9 primaryCpichPower

primaryCpichPower **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.PrimaryCpichPower;

MATCHES FOR

EQUALITY;

BEHAVIOUR

primaryCpichPowerBehaviour;

REGISTERED AS {ts32-644Attribute 9};

primaryCpichPowerBehaviour **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

maximumTransmissionPower **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.MaximumTransmissionPower;

MATCHES FOR

EQUALITY;

BEHAVIOUR

maximumTransmissionPowerBehaviour;

REGISTERED AS {ts32-644Attribute 10};

maximumTransmissionPowerBehaviour **BEHAVIOUR**

DEFINED AS

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

-- 5.3.11 primarySchPower

primarySchPower **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.PrimarySchPower;

MATCHES FOR

EQUALITY;

BEHAVIOUR

primarySchPowerBehaviour;

REGISTERED AS {ts32-644Attribute 11};

primarySchPowerBehaviour **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

secondarySchPower **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.SecondarySchPower;

MATCHES FOR

EQUALITY;

BEHAVIOUR

secondarySchPowerBehaviour;

REGISTERED AS {ts32-644Attribute 12};

secondarySchPowerBehaviour **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

bchPower **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.BchPower;

MATCHES FOR

EQUALITY;

BEHAVIOUR

bchPowerBehaviour;

REGISTERED AS {ts32-644Attribute 13};

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

lac **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.LocationAreaCode;

MATCHES FOR

EQUALITY;

BEHAVIOUR

lacBehaviour;

REGISTERED AS {ts32-644Attribute 14};

lacBehaviour **BEHAVIOUR**

DEFINED AS

"Location Area Code, LAC (Ref. 3 GPP TS 23.003)";

-- 5.3.15 rac

rac **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.Rac;

MATCHES FOR

EQUALITY;

BEHAVIOUR

racBehaviour;

REGISTERED AS {ts32-644Attribute 15};

racBehaviour **BEHAVIOUR**

DEFINED AS

"Routing Area Code, RAC (Ref. 3 GPP TS 23.003)";

-- 5.3.16 sac

sac **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

```
    TS32-644TypeModule.Sac;
  MATCHES FOR
    EQUALITY;
  BEHAVIOUR
    sacBehaviour;
REGISTERED AS {ts32-644Attribute 16};

sacBehaviour BEHAVIOUR
DEFINED AS
  "Service Area Code, RAC (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

externalUtranCellId **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.GeneralObjectId;

MATCHES FOR

EQUALITY;

BEHAVIOUR

adjacentCellBehaviour;

REGISTERED AS {ts32-644Attribute 21};

externalUtranCellIdBehaviour **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

uraList **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.UraList;

MATCHES FOR

EQUALITY;

BEHAVIOUR

uraListBehaviour;

REGISTERED AS {ts32-644Attribute 30};

uraListBehaviour **BEHAVIOUR**

DEFINED AS

"List of UTRAN Registration Area, URA (Ref. 3 GPP TS 25.331)";

-- 5.3.31 uarfcn

uarfcn **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.Uarfcn;

MATCHES FOR

EQUALITY;

BEHAVIOUR

uarfcnBehaviour;

REGISTERED AS {ts32-644Attribute 310600};

uarfcnBehaviour **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

compassDirectionR0610 **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.Angle;

MATCHES FOR

EQUALITY;

BEHAVIOUR

compassDirectionR0610Behaviour;

REGISTERED AS {ts32-644Attribute 430610};

compassDirectionR0610Behaviour **BEHAVIOUR**

DEFINED AS

"This attribute represents the compass direction in degrees (magnetic) that the antenna is pointing in.";

-- 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

retGroupNameR0610 **ATTRIBUTE**

WITH ATTRIBUTE SYNTAX

TS32-644TypeModule.RetGroupName;

MATCHES FOR

EQUALITY;

BEHAVIOUR

retGroupNameR0610Behaviour;

REGISTERED AS {ts32-644Attribute 470610};

retGroupNameR0610Behaviour **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.";

-- 5.4 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

utranCellR0610-rncFunctionR55 **NAME BINDING**

SUBORDINATE OBJECT CLASS

utranCellR0610;

NAMED BY SUPERIOR OBJECT CLASS

rncFunctionR55;

WITH ATTRIBUTE

utranCellId;

BEHAVIOUR

utranCellR0610-rncFunctionR55Behaviour;

CREATE

WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-644NameBinding 30610};

utranCellR0610-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

utranRelationR0600-utranCellR0610 **NAME BINDING**

SUBORDINATE OBJECT CLASS

utranRelationR0600;

NAMED BY SUPERIOR OBJECT CLASS

utranCellR0610;

WITH ATTRIBUTE

utranRelationId;

BEHAVIOUR

utranRelationR0600-utranCellR0610Behaviour;

CREATE

WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-644NameBinding 40610};

utranRelationR0600-utranCellR0610Behaviour **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

externalUtranCellR0600-subNetwork **NAME BINDING**

SUBORDINATE OBJECT CLASS

externalUtranCellR0600;

NAMED BY SUPERIOR OBJECT CLASS

"3GPP TS 32.624": subNetwork;

WITH ATTRIBUTE

externalUtranCellId;

BEHAVIOUR

externalUtranCellR0600-subNetworkBehaviour;

CREATE

WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-644NameBinding 50600};

externalUtranCellR0600-subNetworkBehaviour **BEHAVIOUR**

DEFINED AS

"The name binding represents a relationship in which a subNetwork contains
and controls an externalUtranCellR0600. 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-utranCellR0610 **NAME BINDING**

SUBORDINATE OBJECT CLASS

"3GPP TS 32.654": gsmRelation;

NAMED BY SUPERIOR OBJECT CLASS

utranCellR0610;

WITH ATTRIBUTE

"3GPP TS 32.654": gsmRelationId;

BEHAVIOUR

gsmRelation-utranCellR0610Behaviour;

CREATE

WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-644NameBinding 110610};

gsmRelation-utranCellR0610Behaviour **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 antennaFunctionR0610 - managedElement

antennaFunctionR0610-managedElement **NAME BINDING**

SUBORDINATE OBJECT CLASS

antennaFunctionR0610;

NAMED BY SUPERIOR OBJECT CLASS

"3GPP TS 32.624": managedElement;

WITH ATTRIBUTE

antennaFunctionIdR0610;

BEHAVIOUR

antennaFunctionR0610-managedElementBehaviour;

CREATE

WITH-REFERENCE-OBJECT, WITH-AUTOMATIC-INSTANCE-NAMING;

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS;

REGISTERED AS {ts32-644NameBinding 200610};

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.";

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..359)

BchPower ::= INTEGER

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

CellParameterId ::= INTEGER (0..127)

CId ::= INTEGER

DwPchPower ::= INTEGER (-150..400)

Height ::= INTEGER

Lac ::= INTEGER

LocalCellId ::= INTEGER

MaximumTransmissionPower ::= INTEGER

PrimaryCcpchPower ::= INTEGER (-150..400)

PrimaryCpichPower ::= INTEGER
```

PrimarySchPower ::= INTEGER

PrimaryScramblingCode ::= INTEGER

Rac ::= INTEGER

RetGroupName ::= GraphicString

RncId ::= INTEGER

Sac ::= INTEGER

SchPower ::= INTEGER (-350..150)

SecondarySchPower ::= INTEGER

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
                                   -- range of timeSlotId: (0…14),
                                   -- when applied to 3.84Mcps TDD Mode Cell
timeSlotDirection     TimeSlotDirection,
timeSlotStatus        TimeSlotStatus
}
```

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

Uarfcn ::= INTEGER

UarfcnDl ::= INTEGER

UarfcnUl ::= INTEGER

UraList ::= SET OF INTEGER

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 OID : ts32-644ObjectClass 8	Name: rncFunction OID : ts32-644ObjectClass 1
utranCell	Name: utranCellR0610 OID : ts32-644ObjectClass 20610	Name: utranCellR55 OID : ts32-644ObjectClass 9 Name: utranCellR54 OID : ts32-644ObjectClass 7 Name: utranCell OID : ts32-644ObjectClass 2 Name: utranCellR0600 OID : ts32-644ObjectClass 20600
utranRelation	Name: utranRelationR0600 OID : ts32-644ObjectClass 30600	Name: utranRelation OID : ts32-644ObjectClass 3
externalUtranCell	Name: externalUtranCellR0600 OID : ts32-644ObjectClass 40600	Name: externalUtranCellR0506 OID : ts32-644ObjectClass 40506 Name: externalUtranCell OID : ts32-644ObjectClass 4
iubLink	Name: iubLinkR0600 OID : ts32-644ObjectClass 50600	Name: iubLink OID : ts32-644ObjectClass
nodeBFunction	Name: nodeBFunction OID : ts32-644ObjectClass 6	--
antennaFunction	Name: antennaFunctionR0610 OID : ts32-644ObjectClass 70610	
Packages		
rncFunctionHandoverPackage	Name: rncFunctionHandoverPackageR55 OID : ts32-644Package 14	Name: rncFunctionHandoverPackage OID : ts32-644Package 1
utranCellHandoverPackage	Name: utranCellHandoverPackageR0600 OID : ts32-644Package 20600	Name: utranCellHandoverPackageR55 OID : ts32-644Package 15 Name: utranCellHandoverPackageR54 OID : ts32-644Package 13 Name: utranCellHandoverPackage OID ts32-644Package 2
utranRelationBasicPackage	Name: utranRelationBasicPackageR0600 OID : ts32-644Package 30600	Name: utranRelationBasicPackage OID : ts32-644Package 3
utranRelationAssociationPackage	Name: utranRelationAssociationPackage OID ts32-644Package 4	--
externalUtranCellPackage	Name: externalUtranCellPackageR0600 OID : ts32-644Package 50600	Name: externalUtranCellPackageR0506 OID : ts32-644Package 50506 Name: externalUtranCellPackage OID : ts32-644Package 5
rncFunctionBasicPackage	Name: rncFunctionBasicPackage 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: utranFDDCellHandoverPackage OID : ts32-644Package 130600	--
utran1-28McpsTDDCellHandoverPackage	Name: utran1-28McpsTDDCellHandoverPackage OID : ts32-644Package 140600	--
utran3-84McpsTDDCellHandoverPackage	Name: utran3-84McpsTDDCellHandoverPackage OID : ts32-644Package 150600	--
utranRelationFDDHandoverPackage	Name: utranRelationFDDHandoverPackage OID : ts32-644Package 160600	--
utranRelationTDDHandoverPackage	Name: utranRelationTDDHandoverPackage OID : ts32-644Package 170600	--
externalUtranFDDCellHandoverPackage	Name: externalUtranFDDCellHandoverPackage OID : ts32-644Package 180600	--
externalUtranTDDCellHandoverPackage	Name: externalUtranTDDCellHandoverPackage OID : ts32-644Package 190600	--
iubLink2aTMChannelTerminationPointAssociationPackage	Name: iubLink2aTMChannelTerminationPointAssociationPackage OID : ts32-644Package 200600	--
antennaFunctionBasicPackage	Name: antennaFunctionBasicPackageR0610 OID : ts32-644Package 220610	--
antennaFunctionOptionalPackage	Name: antennaFunctionOptionalPackageR0610 OID : ts32-644Package 230610	--
Actions		
Notifications		
Attributes		
Mcc	Name: mcc OID : ts32-644Attribute 1	--
Mnc	Name: mnc OID : ts32-644Attribute 2	--
rncId	Name: rncIdR55 OID : ts32-644Attribute 31	Name: rncId 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
uarfcnUl	Name: uarfcnUl OID : ts32-644Attribute 6	--
uarfcnDl	Name: uarfcnDl OID : ts32-644Attribute 7	--
primaryScramblingCode	Name: primaryScramblingCode OID : ts32-644Attribute 8	--
primaryCpichPower	Name: primaryCpichPower OID : ts32-644Attribute 9	--
maximumTransmissionPower	Name: maximumTransmissionPower OID : ts32-644Attribute 10	--
primarySchPower	Name: primarySchPower OID : ts32-644Attribute 11	--
secondarySchPower	Name: secondarySchPower OID : ts32-644Attribute 12	--
bchPower	Name: bchPower OID : ts32-644Attribute 13	--
Lac	Name: lac OID : ts32-644Attribute 14	--
Rac	Name: rac OID : ts32-644Attribute 15	--
Sac	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: externalUtranCellId OID : ts32-644Attribute 21	--
rncFunctionId	Name: rncFunctionId 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: uraList OID : ts32-644Attribute 30	--
Uarfcn	Name: uarfcn OID : ts32-644Attribute 310600	--
cellParameterId	Name: cellParameterId OID : ts32-644Attribute 320600	--
primaryCcpchPower	Name: primaryCcpchPower 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	--
retTiltValue	Name: retTiltValueR0610 OID : ts32-644Attribute 420610	--
compassDirection	Name: compassDirectionR0610 OID : ts32-644Attribute 430610	--
maxTiltValue	Name: maxTiltValueR0610 OID : ts32-644Attribute 440610	--
minTiltValue	Name: minTiltValueR0610 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	--
Parameters		
Name Bindings		
rncFunction-managedElement	Name: rncFunctionR55-managedElement OID : ts32-644NameBinding 15	Name: rncFunction-managedElement OID : ts32-644NameBinding 1
nodeBFunction-managedElement	Name: nodeBFunction-managedElement OID : ts32-644NameBinding 2	--

utranCell-rncFunction	Name: utranCellR0610-rncFunctionR55 OID : ts32-644NameBinding 30610	Name: utranCellR55-rncFunctionR55 OID : ts32-644NameBinding 17 Name: utranCellR54-rncFunction OID : ts32-644NameBinding 12 Name: utranCell-rncFunction OID : ts32-644NameBinding 3 Name: utranCellR0600-rncFunctionR55 OID : ts32-644NameBinding 30600
utranRelation-utranCell	Name: utranRelationR0600-utranCellR0610 OID : ts32-644NameBinding 40610	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
externalUtranCell - subNetwork	Name: externalUtranCellR0600-subNetwork OID : ts32-644NameBinding 50600	Name: externalUtranCellR0506-subNetwork OID : ts32-644NameBinding 50506 Name: externalUtranCell-subNetwork OID : ts32-644NameBinding 5
vsDataContainer-rncFunction	--	Name: vsDataContainer-rncFunction 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-rncFunction	Name: iubLinkR0600-rncFunctionR55 OID : ts32-644NameBinding 100600	Name: iubLink-rncFunctionR55 OID : ts32-644NameBinding 16 Name: iubLink-rncFunction OID : ts32-644NameBinding 10
gsmRelation-utranCell	Name: gsmRelation-utranCellR0610 OID : ts32-644NameBinding 110610	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
antennaFunctionR0610-managedElement	Name: antennaFunctionR0610-managedElement OID : ts32-644NameBinding 200610	--

Annex B (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2001	S_12	SP-010283	--	--	Approved at TSG SA #12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	S_13	SP-010478	001	--	Correction due to TS renumbering	4.0.0	4.1.0
Sep 2002	--	--	--	--	Cosmetics/Styles	4.1.0	4.1.1
Dec 2002	S_18	SP-020749	007	--	Alignment of the CMIP SS with the Rel-5 version of the IS in 32.642	4.1.1	5.0.0
Jun 2003	S_20	SP-030283	003	--	Removal of relationType	5.0.0	5.1.0
Sep 2003	S_21	SP-030420	004	--	Correction of wrong attribute name	5.1.0	5.2.0
Dec 2003	S_22	SP-030646	009	--	Correction of the number of possible URAs from 1 to 8	5.2.0	5.3.0
Dec 2003	S_22	SP-030642	010	--	Add notifications to functional objects - Align with 32.642 (IS)	5.2.0	5.3.0
Mar 2004	S_23	SP-040132	011	--	Correction of OIDs of the MOCs, packages and attributes affected by the change from ura to uraList	5.3.0	5.4.0
Jun 2004	S_24	SP-040255	012	--	Correction of type of the attributes cId, localCellId and rncId	5.4.0	5.5.0
Jun 2004	S_24	SP-040254	013	--	The specification does not support all UMTS frequency bands	5.4.0	5.5.0
Sep 2004	S_25	SP-040591	014	--	Correction of the types of the attributes cId, localCellId and rncId	5.5.0	5.6.0
Dec 2004	S_26	SP-040810	015	--	Add support for the TDD mode, the state change notification and ATM management – Align with 32.642	5.6.0	6.0.0
Mar 2005	S_27	SP-050048	016	--	Add RET support – Align with 32.642 Configuration Management UTRAN network resources IRP NRM	6.0.0	6.1.0

History

Document history		
V6.0.0	December 2004	Publication
V6.1.0	March 2005	Publication