ETSI TS 128 653 V11.0.0 (2013-01)

Technical Specification

**Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Universal Terrestrial Radio Access Network (UTRAN)
Network Resource Model (NRM)
Integration Reference Point (IRP);
Solution Set (SS) definitions
(3GPP TS 28.653 version 11.0.0 Release 11)**

Reference

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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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Ready for Converged Management

This specification is part of a set that has been developed for converged management solutions.

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:

28.651   **UTRAN Network Resource Model (NRM) Integration Reference Point (IRP); Requirements**

28.652   UTRAN Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)

28.653   UTRAN Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definition

1 Scope

The present document specifies the Solution Sets for the UTRAN NRM IRP.

This Solution Set specification is related to 3GPP TS 28.652 V11.0.X [4].

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 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".

[4]   3GPP TS 28.652: "Telecommunication management; Universal Terrestrial Radio Access Network (UTRAN) Network Resource Model (NRM) Integration Reference Point (IRP);Information Service (IS)".

[5]   3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".

[6]   3GPP TS 32.306: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Solution Set (SS) definitions".

[7]   3GPP TS 32.616: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Solution Set (SS) definitions".

[8]   W3C REC-xml-20001006: "Extensible Markup Language (XML) 1.0 (Second Edition)".

[9]   W3C REC-xmlschema-0-20010502: "XML Schema Part 0: Primer".

[10]   W3C REC-xmlschema-1-20010502: "XML Schema Part 1: Structures".

[11]   W3C REC-xmlschema-2-20010502: "XML Schema Part 2: Datatypes".

[12]   W3C REC-xml-names-19990114: "Namespaces in XML".

[13]   3GPP TS 28.623: "Generic Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definition".

3 Definitions and abbreviations

3.1 Definitions

For terms and definitions please refer to 3GPP TS 32.101 [1], 3GPP TS 32.102 [2], 3GPP TS 32.600 [3] and 3GPP TS 32.642 [4].

XML file: See definition of [13].

XML document: See definition of [13].

XML declaration: See definition of [13].

XML element: See definition of [13].

empty XML element: See definition of [13].

XML content (of an XML element): See definition of [13].

XML start-tag: See definition of [13].

XML end-tag: See definition of [13].

XML empty-element tag: See definition of [13].

XML attribute specification: See definition of [13].

DTD: See definition of [13].

XML schema: See definition of [13].

XML namespace: See definition of [13].

XML complex type: See definition of [13].

XML element type: See definition of [13].

3.2 Abbreviations

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

CM	Configuration Management
CORBA	Common Object Request Broker Architecture
DN	Distinguished Name
DTD	Document Type Definition
EDGE	Enhanced Data for GSM Evolution
GERAN	GSM/EDGE Radio Access Network
GSM	Global System for Mobile communication
IS	Information Service
IDL	Interface Definition Language (OMG)
IOC	Information Object Class
IRP	Integration Reference Point
IS	Information Service
MO	Managed Object
MOC	Managed Object Class
NRM	Network Resource Model
OMG	Object Management Group
SIPTO	Selected IP Traffic Offload
SS	Solution Set
UMTS	Universal Mobile Telecommunications System

UTRAN	Universal Terrestrial Radio Access Network
XML	eXtensible Markup Language

4 Solution Set Definitions

This specification defines the following 3GPP UTRAN NRM IRP Solution Set Definitions:

- 3GPP UTRAN NRM IRP CORBA SS (Annex A)

- 3GPP UTRAN NRM IRP XML Definitions (Annex B)

Annex A (normative):
CORBA Solution Set

This annex contains the CORBA Solution Set for the IRP whose semantics is specified in UTRAN NRM IRP: Information Service (TS 32.642 [4]).

A.1 Architectural features

The overall architectural feature of UTRAN Network Resources IRP is specified in 3GPP TS 32.642 [4]. This clause specifies features that are specific to the CORBA SS.

A.1.1 Syntax for Distinguished Names

See clause A.1.1 of [13].

A.1.2 Rules for NRM extensions

See clause A.1.2 of [13].

A.2 Mapping

A.2.1 General mapping

See clause A.1.2.1 of [13].

A.2.2 Information Object Class (IOC) mapping

A.2.2.1 IOC RncFunction

Mapping from NRM IOC RncFunction attributes to SS equivalent MOC RncFunction attributes

NRM Attributes of IOC RncFunction in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
id	rncFunctionId	string	M	M	-
mcc	mcc	long	M	M	M
mnc	mnc	long	M	M	M
rncId	rncId	long	M	M	M
siptoSupported	siptoSupported	short	M	M	-
tceIDMappingInfoList	tceIDMappingInfoList	GenericNRMAttributeTypes:: TceIDMappingInfoListType	CM	M	M

A.2.2.2 IOC UtranGenericCell

Mapping from NRM IOC UtranGenericCell attributes and associations to SS equivalent MOC UtranGenericCell attributes

NRM Associations/Attributes of IOC UtranGenericCell in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier
id	id	string	M
cId	cId	long	M
localCellId	localCellId	long	M
relatedAntennaList	relatedAntennaList	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReferenceSet	O
maximumTransmissionPower	maximumTransmissionPower	short	M
lac	lac	long	M
pichPower	pichPower	float	CM
pchPower	pchPower	float	CM
fachPower	fachPower	float	CMO
rac	rac	long	CM
sac	sac	long	M
uraList	uraList	GenericNetworkResourcesIRPSystem::AttributeTypes::LongSet	CM
AssociatedWith/ utranCell-IubLink	utranCellIubLink	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReference	M
cellMode	cellMode	GenericNRMAttributeTypes:: CellModeEnumType	M
operationalState	operationalState	StateManagementIRPOptConstDefs::OperationalStateTypeOpt	O
hsFlag	hsFlag	short	CM
hsEnable	hsEnable	short	CM
numOfHspdschs	numOfHspdschs	short	CM
numOfHsscchs	numOfHsscchs	short	O
frameOffset	frameOffset	short	CO
cellIndividualOffset	cellIndividualOffset	float	CO
hcsPrio	hcsPrio	short	CO
maximumAllowedUlTxPower	maximumAllowedUlTxPower	short	CO
snaInformation	snaInformation	GenericNetworkResourceMAttributeTypes:: snaInformationType	CO
qrxlevMin	qrxlevMin	short	CO
deltaQrxlevmin	deltaQrxlevmin	short	CO
qhcs	qhcs	short	CO
penaltyTime	penaltyTime	short	CO
referenceTimeDifferenceToCell	referenceTimeDifferenceToCell	short	CO
readSFNIndicator	readSFNIndicator	boolean	CO
restrictionStateIndicator	restrictionStateIndicator	GenericNetworkResourceMAttributeTypes:: restrictionStateEnumType	CO
dpcModeChangeSupportIndicator	dpcModeChangeSupportIndicator	GenericNetworkResourceMAttributeTypes:: dpcModeChangeSupportEnumType	CO
relatedTmaList	relatedTmaList	GenericNetworkResourceIRPSystem::AttributeTypes::MOReferenceSet	O
relatedSectorEquipment	relatedSectorEquipment	GenericNetworkResourceIRPSystem::AttributeTypes::MOReference	O
NOTE 1: For all support qualifiers with the value "O", see attribute constraints in TS 32.642 [4]. NOTE 2: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4]. NOTE 3: For all support qualifiers with the value "CM" see attribute constraints in TS 32.642 [4].			

A.2.2.3   IOC NodeBFunction

Mapping from NRM IOC NodeBFunction attributes and associations to SS equivalent MOC NodeBFunction attributes

NRM Attributes of IOC NodeBFunction in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`id`	`nodeBFunctionId`	string	M	M	-
`ConnectedTo/ nodeBFunction-IubLink`	`nodeBFunctionIubLink`	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReference	M	M	-

A.2.2.4   IOC IubLink

Mapping from NRM IOC IubLink attributes and associations to SS equivalent MOC IubLink attributes

NRM Attributes of IOC IubLink in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`id`	`iubLinkId`	string	M	M	-
`AssociatedWith/ iubLink-UtranCell`	`iubLinkUtranCell`	GenericNetworkResourcesIRPSystem::AttributeTypes:: MOReferenceSet	M	M	M
`ConnectedTo/ iubLink-NodeBFunction`	`iubLinkNodeBFunction`	GenericNetworkResourcesIRPSystem::AttributeTypes:: MOReference	M	M	-
`AssociatedWith1/ iubLink-ATMChannelTerminationPoint`	`iubLinkATMChannelTermination Point`	GenericNetworkResourcesIRPSystem::AttributeTypes:: MOReference	M	M	-

A.2.2.5   IOC ExternalUtranGenericCell

Mapping from NRM IOC ExternalUtranGenericCell attributes and associations to SS equivalent MOC ExternalUtranGenericCell attributes

NRM Attributes of IOC ExternalUtranGenericCell in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`id`	`id`	string	M	M	-
`cId`	`cId`	long	M	M	M
`Mcc`	`mcc`	short	M	M	M
`Mnc`	`mnc`	short	M	M	M
`rncId`	`rncId`	long	M	M	M
`cellMode`	`cellMode`	GenericNRMAttributeTypes::CellModeEnumType	M	M	-
`lac`	`lac`	long	M	M	M
`rac`	`rac`	long	CM	M	M
`controllingRnc`	`controllingRnc`	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReference	O	M	-
`hsFlag`	`hsFlag`	short	CM	M	-
`frameOffset`	`frameOffset`	short	CO	M	-
`cellIndividualOffset`	`cellIndividualOffset`	long	CO	M	-
`hcsPrio`	`hcsPrio`	short	CO	M	-
`maximumAllowedUlTxPower`	`maximumAllowedUlTxPower`	short	CO	M	-
`qrxlevMin`	`qrxlevMin`	short	CO	M	-
`deltaQrxlevmin`	`deltaQrxlevmin`	short	CO	M	-
`Qhcs`	`qhcs`	short	CO	M	-
`penaltyTime`	`penaltyTime`	short	CO	M	-
`referenceTimeDifferenceToCell`	`referenceTimeDifferenceToCell`	short	CO	M	-
`readSFNIndicator`	`readSFNIndicator`	boolean	CO	M	-
`restrictionStateIndicator`	`restrictionStateIndicator`	GenericNetworkResourceMAttributeTypes:: restrictionStateEnumType	CO	M	-
`dpcModeChangeSupportIndicator`	`dpcModeChangeSupportIndicator`	GenericNetworkResourceMAttributeTypes:: dpcModeChangeSupportEnumType	CO	M	-
`snaInformation`	`snaInformation`	GenericNetworkResourceMAttributeTypes:: snaInformationType	CO	M	-
NOTE 1: For all support qualifiers with the value "O", see attribute constraints in TS 32.642 [4]. NOTE 2: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4]. NOTE 3: For all support qualifiers with the value "CM" see attribute constraints in TS 32.642 [4].					

A.2.2.6   Void

A.2.2.7   IOC ExternalRncFunction

Mapping from NRM IOC ExternalRncFunction attributes and associations to SS equivalent MOC ExternalRncFunction attributes

NRM Attributes of IOC ExternalRncFunction in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`id`	`externalRncFunctionId`	string	M	M	-
`mcc`	`mcc`	long	M	M	M
`mnc`	`mnc`	long	M	M	M
`rncId`	`rncId`	long	M	M	M
`controlledCellList`	`controlledCellList`	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReferenceSet	O	M	-
NOTE: For all support qualifiers with the value "O", see attribute constraints in TS 32.642 [4].					

A.2.2.8   UtranCellFDD

Mapping from NRM IOC UtranCellFDD attributes and associations to SS equivalent MOC UtranCellFDD attributes

NRM Attributes of IOC UtranCellFDD in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`uarfcnUl`	`uarfcnUl`	short	O	M	M
`uarfcnDl`	`uarfcnDl`	short	O	M	M
`primaryScramblingCode`	`primaryScramblingCode`	short	O	M	M
`primaryCpichPower`	`primaryCpichPower`	float	O	M	M
`primarySchPower`	`primarySchPower`	float	O	M	M
`secondarySchPower`	`secondarySchPower`	float	O	M	M
`bchPower`	`bchPower`	float	O	M	M
`aichPower`	`aichPower`	float	O	M	-
`qqualMin`	`qqualMin`	float	CO	M	-
`cellCapabilityContainerFDD`	`cellCapabilityContainerFDD`	FDDNetworkResourceMAttributeTypes:: CellCapabilityContainerFDDType	CO	M	-
`txDiversityIndicator`	`txDiversityIndicator`	FDDNetworkResourceMAttributeTypes:: txDiversityIndicatorEnumType	CO	M	-
`temporaryOffset1`	`temporaryOffset1`	short	CO	M	-
`temporaryOffset2`	`temporaryOffset2`	short	CO	M	-
`sttdSupportIndicator`	`sttdSupportIndicator`	FDDNetworkResourceMAttributeTypes:: sttdSupportEnumType	CO	M	-
`closedLoopMode1SupportIndicator`	`closedLoopMode1SupportIndicator`	FDDNetworkResourceMAttributeTypes:: closedLoopMode1EnumType	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.9   UtranCellTDD

Mapping from NRM IOC UtranCellTDD attributes and associations to SS equivalent MOC UtranCellTDD attributes

NRM Attributes of IOC UtranCellTDD in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
`uarfcn`	`uarfcn`	short	O	M	M
`cellParameterId`	`cellParameterId`	long	O	M	M
`primaryCcpchPower`	`primaryCcpchPower`	float	O	M	M
`cellCapabilityContainerTDD`	`cellCapabilityContainerTDD`	TDDNetworkResourceMAttributeTypes:: CellCapabilityContainerTDDType	CO	M	-
`sctdIndicator`	`sctdIndicator`	TDDNetworkResourceMAttributeTypes:: `sctdSupport`EnumType	CO	M	-
`dpchConstantValue`	`dpchConstantValue`	long	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.10 UtranCellTDDLcr

Mapping from NRM IOC UtranCellTDDLcr attributes and associations to SS equivalent MOC UtranCellTDDLcr attributes

NRM Attributes of IOC UtranCellTDDLcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
uarfcnLCRList	uarfcnLCRList	TDDNRMAttributeTypes:: UarfcnLCRListConfigStructType	O	M	M
dwPchPower	dwPchPower	float	O	M	M
fpachPower	fpachPower	float	O	M	O
tstdIndicator	tstdIndicator	TDDNRMAttributeTypes:: tstdIndicatorEnumType	CO	M	-
timeSlotLCRList	timeSlotLCRList	TDDNRMAttributeTypes:: TimeSlotListConfigStructType	O	M	M
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.11 UtranCellTDDHcr

Mapping from NRM IOC UtranCellTDDHcr attributes and associations to SS equivalent MOC UtranCellTDDHcr attributes

NRM Attributes of IOC UtranCellTDDHcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
schPower	schPower	float	O	M	M
temporaryOffset1	temporaryOffset1	short	CO	M	-
syncCase	syncCase	short	CO	M	-
timeSlotForSch	timeSlotForSch	short	CO	M	-
schTimeSlot	schTimeSlot	short	CO	M	
timeSlotHCRList	timeSlotHCRList	TDDNRMAttributeTypes:: TimeSlotListConfigStructType	O	M	M
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.12 ExternalUtranCellFDD

Mapping from NRM IOC ExternalUtranCellFDD attributes and associations to SS equivalent MOC ExternalUtranCellFDD attributes

NRM Attributes of IOC UtranCellTDDHcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
uarfcnUl	uarfcnUl	short	O	M	M
uarfcnDl	uarfcnDl	short	O	M	M
primaryScramblingCode	primaryScramblingCode	short	O	M	M
primaryCpichPower	primaryCpichPower	float	O	M	M
qqualMin	qqualMin	long	CO	M	-
cellCapabilityContainerFDD	cellCapabilityContainerFDD	FDDNetworkResourceMAttributeTypes:: CellCapabilityContainerFDDType	CO	M	-
txDiversityIndicator	txDiversityIndicator	FDDNetworkResourceMAttributeTypes:: txDiversityIndicatorEnumType	CO		-
temporaryOffset1	temporaryOffset1	short	CO	M	-
temporaryOffset2	temporaryOffset2	short	CO	M	-
sttdSupportIndicator	sttdSupportIndicator	FDDNetworkResourceMAttributeTypes:: sttdSupportEnumType	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.13 ExternalUtranCellTDD

Mapping from NRM IOC ExternalUtranCellTDD attributes and associations to SS equivalent MOC ExternalUtranCellTDD attributes

NRM Attributes of IOC UtranCellTDDHcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
uarfcn	uarfcn	short	O	M	M
cellParameterId	cellParameterId	long	O	M	-
primaryCcpchPower	primaryCcpchPower	float	O	M	-
cellCapabilityContainerTDD	cellCapabilityContainerTDD	TDDNetworkResourceMAttributeTypes:: CellCapabilityContainerFDDType	CO	M	-
sctdIndicator	sctdIndicator	TDDNetworkResourceMAttributeTypes:: sctdSupportEnumType	CO	M	-
dpchConstantValue	dpchConstantValue	long	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.14 ExternalUtranCellTDDHcr

Mapping from NRM IOC ExternalUtranCellTDDHcr attributes and associations to SS equivalent MOC ExternalUtranCellTDDHcr attributes

NRM Attributes of IOC UtranCellTDDLcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
temporaryOffset1	temporaryOffset1	short	CO	M	-
syncCase	syncCase	short	CO	M	-
timeSlotForSch	timeSlotForSch	short	CO	M	-
schTimeSlot	schTimeSlot	short	CO	M	-
timeSlotHCRList	timeSlotHCRList	TDDNRMAttributeTypes:: TimeSlotListConfigStructType	O	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.15 ExternalUtranCellTDDLcr

Mapping from NRM IOC ExternalUtranCellTDDLcr attributes and associations to SS equivalent MOC ExternalUtranCellTDDLcr attributes

NRM Attributes of IOC UtranCellTDDLcr in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
tstdIndicator	tstdIndicator	TDDNRMAttributeTypes:: tstdIndicatorEnumType	CO	M	-
timeSlotLCRList	timeSlotLCRList	TDDNRMAttributeTypes:: TimeSlotListConfigStructType	O	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.16 IOC UtranRelation

Mapping from NRM IOC UtranRelation attributes and associations to SS equivalent MOC UtranRelation attributes

NRM Attributes of IOC UtranRelation in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
id	utranRelationId	string	M	M	-
adjacentCell	adjacentCell	string	M	M	M

A.2.2.17 IOC EP_IuCS

Mapping from NRM IOC EP_IuCS attributes and associations to SS equivalent MOC EP_IuCS attributes

NRM Attributes of IOC EP_IuCS in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
connMscNumber	connMscNumber	unsigned short	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.18 IOC EP_IuPS

Mapping from NRM IOC EP_IuPS attributes and associations to SS equivalent MOC EP_IuPS attributes

NRM Attributes of IOC EP_IuCS in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
connSgsnNumber	connSgsnNumber	unsigned short	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.2.2.19 IOC EP_Iur

Mapping from NRM IOC EP_Iur attributes and associations to SS equivalent MOC EP_Iur attributes

NRM Attributes of IOC EP_Iur in TS 32.642 [4]	SS Attributes	SS Type	Support Qualifier	Read	Write
connectedRncId	connectedRncId	unsigned short	CO	M	-
NOTE: For all support qualifiers with the value "CO" see attribute constraints in TS 32.642 [4].					

A.3 Solution Set definitions

A.3.1 IDL definition structure

Clause A.3.2 defines the MO classes for the UTRAN NRM IRP.

A.3.2 IDL specification "UtranNetworkResourcesNRMDefs.idl"

```
//File:UtranNetworkResourcesNRMDefs.idl
#ifndef _UTRANNETWORKRESOURCESNRMDEFS_IDL_
#define _UTRANNETWORKRESOURCESNRMDEFS_IDL_
#include "GenericNetworkResourcesNRMDefs.idl"
#pragma prefix "3gppsa5.org"
/**
 * This module defines constants for each MO class name and
 * the attribute names for each defined MO class.
 */
module UtranNetworkResourcesNRMDefs
{

    /**
     *  Definitions for MO class RncFunction
     */
    interface RncFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
    {
       const string CLASS = "RncFunction";
       // Attribute Names
       //
       const string rncFunctionId = "rncFunctionId";
       const string mcc= "mcc";
       const string mnc= "mnc";
       const string rncId= "rncId";
       const string siptoSupported= "siptoSupported";
       const string tceIDMappingInfoList= "tceIDMappingInfoList";
    };
    /**
     *  Definitions for MO class UtranGenericCell
     */
    interface UtranGenericCell : GenericNetworkResourcesNRMDefs::ManagedFunction
    {
       const string CLASS = "UtranGenericCell";
       // Attribute Names
       //
       const string id = "id";
       const string utranCellIubLink = "utranCellIubLink";
       const string cId= "cId";
       const string localCellId= "localCellId";

       const string maximumTransmissionPower= "maximumTransmissionPower";
       const string relatedAntennaList= "relatedAntennaList";
       const string primarySchPower= "primarySchPower";
       const string secondarySchPower= "secondarySchPower";
       const string bchPower= "bchPower";

       const string fpachPower= "fpachPower";
       const string pichPower= "pichPower";
       const string pchPower= "pchPower";
       const string fachPower= "fachPower";
       const string cellMode = "cellMode";


       const string lac= "lac";
       const string rac= "rac";
       const string sac= "sac";
       const string uraList= "uraList";
       const string operationalState = "operationalState";
       const string relatedTmaList = "relatedTmaList";
       const string hsFlag = "hsFlag";
       const string hsEnable = "hsEnable";
       const string numOfHspdschs = "numOfHspdschs";
```

```
            const string numOfHsscchs = "numOfHsscchs";
            const string snaInformation = "snaInformation";
            const string frameOffset = "frameOffset";
            const string cellIndividualOffset = "cellIndividualOffset";
            const string hcsPrio = "hcsPrio";
            const string maximumAllowedUlTxPower = "maximumAllowedUlTxPower";
            const string qrxlevMin = "qrxlevMin";
            const string deltaQrxlevmin = "deltaQrxlevmin";
            const string qhcs = "qhcs";
            const string penaltyTime = "penaltyTime";
            const string referenceTimeDifferenceToCell = "referenceTimeDifferenceToCell";
            const string readSFNIndicator = "readSFNIndicator";
            const string restrictionStateIndicator = "restrictionStateIndicator";
            const string dpcModeChangeSupportIndicator = "dpcModeChangeSupportIndicator";
            const string relatedSectorEquipment = "relatedSectorEquipment";
        };


        /**
         *  Definitions for MO class NodeBFunction
         */
        interface NodeBFunction : GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "NodeBFunction";
            // Attribute Names
            //
            const string nodeBFunctionId = "nodeBFunctionId";
            const string nodeBFunctionIubLink = "nodeBFunctionIubLink";
        };

        /**
         *  Definitions for MO class IubLink
         */
        interface IubLink : GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "IubLink";
            // Attribute Names
            //
            const string iubLinkId = "iubLinkId";
            const string iubLinkNodeBFunction = "iubLinkNodeBFunction";
            const string iubLinkUtranCell = "iubLinkUtranCell";
            const string iubLinkATMChannelTerminationPoint = "iubLinkATMChannelTerminationPoint";

        };
        /**
         *  Definitions for MO class UtranRelation
         */
        interface UtranRelation : GenericNetworkResourcesNRMDefs::Top
        {
            const string CLASS = "UtranRelation";
            // Attribute Names
            //
            const string utranRelationId = "utranRelationId";
            const string adjacentCell = "adjacentCell";

};
/**
         *  Definitions for MO class ExternalUtranGenericCell
         */
        interface ExternalUtranGenericCell  : GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "ExternalUtranGenericCell";
            // Attribute Names
            //
            const string id = "id";
            const string cId= "cId";
            const string mcc= "mcc";
            const string mnc= "mnc";
            const string rncId= "rncId";

            const string cellMode = "cellMode";
            const string uarfcn= "uarfcn";
            const string cellParameterId= "cellParameterId";

            const string lac= "lac";
            const string rac= "rac";
            const string controllingRnc = "controllingRnc";
```

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```
         const string hsFlag = "hsFlag";
         const string frameOffset = "frameOffset";
         const string cellIndividualOffset = "cellIndividualOffset";
         const string hcsPrio = "hcsPrio";
         const string maximumAllowedUlTxPower = "maximumAllowedUlTxPower";
         const string qrxlevMin = "qrxlevMin";
         const string deltaQrxlevmin = "deltaQrxlevmin";
         const string qhcs = "qhcs";
         const string penaltyTime = "penaltyTime";
         const string referenceTimeDifferenceToCell = "referenceTimeDifferenceToCell";
         const string readSFNIndicator = "readSFNIndicator";
         const string restrictionStateIndicator = "restrictionStateIndicator";
         const string dpcModeChangeSupportIndicator = "dpcModeChangeSupportIndicator";
      };
   /**
    *  Definitions for MO class ExternalRncFunction
    */
   interface ExternalRncFunction :
      GenericNetworkResourcesNRMDefs::ManagedFunction
   {
      const string CLASS = "ExternalRncFunction";
      // Attribute Names
      //
      const string externalRncFunctionId = "externalRncFunctionId";
      const string mcc = "mcc";
      const string mnc = "mnc";
      const string rncId = "rncId";
      const string controlledCellList = "controlledCellList";
   };


   /**
    *  Definitions for MO class UtranCellFDD
    */
   interface UtranCellFDD : UtranGenericCell
   {
      const string CLASS = "UtranCellFDD";
      // Attribute Names
      //
      const string uarfcnUl = "uarfcnUl";
      const string uarfcnDl = "uarfcnDl";
      const string primaryScramblingCode = "primaryScramblingCode";
      const string primaryCpichPower = "primaryCpichPower";
      const string primarySchPower = "primarySchPower";
      const string secondarySchPower = "secondarySchPower";
      const string bchPower = "bchPower";
      const string aichPower = "aichPower";
      const string qqualMin = "qqualMin";
      const string cellCapabilityContainerFDD = "cellCapabilityContainerFDD";
      const string txDiversityIndicator = "txDiversityIndicator";
      const string temporaryOffset1 = "temporaryOffset1";
      const string temporaryOffset2 = "temporaryOffset2";
      const string sttdSupportIndicator = "sttdSupportIndicator";
      const string closedLoopMode1SupportIndicator = "closedLoopMode1SupportIndicator";
   };


   /**
    *  Definitions for MO class UtranCellTDD
    */
   interface UtranCellTDD : UtranGenericCell
   {
      const string CLASS = "UtranCellTDD";
      // Attribute Names
      //
      const string uarfcn = "uarfcn";
      const string cellParameterId = "cellParameterId";
      const string primaryCcpchPower = "primaryCcpchPower";
      const string cellCapabilityContainerTDD = "cellCapabilityContainerTDD";
      const string sctdIndicator = "sctdIndicator";
      const string dpchConstantValue = "dpchConstantValue";
   };
   /**
    *  Definitions for MO class UtranCellTDDLcr
    */
   interface UtranCellTDDLcr : UtranCellTDD
   {
      const string CLASS = "UtranCellTDDLcr";
      // Attribute Names
      //
```

```
      const string uarfcnLCRList = "uarfcnLCRList";
      const string fpachPower = "fpachPower";
      const string dwPchPower = "dwPchPower";
      const string tstdIndicator = "tstdIndicator";
      const string timeSlotLCRList = "timeSlotLCRList";
   };

   /**
    *  Definitions for MO class UtranCellTDDHcr
    */
   interface UtranCellTDDHcr : UtranCellTDD
   {
      const string CLASS = "UtranCellTDDHcr";
      // Attribute Names
      //
      const string schPower = "schPower";
      const string temporaryOffset1 = "temporaryOffset1";
      const string syncCase = "syncCase";
      const string timeSlotForSch = "timeSlotForSch";
      const string schTimeSlot = "schTimeSlot";
      const string timeSlotHCRList = "timeSlotHCRList";
   };
   /**
    *  Definitions for MO class ExternalUtranCellFDD
    */
   interface ExternalUtranCellFDD : ExternalUtranGenericCell
   {
      const string CLASS = "ExternalUtranCellFDD";
      // Attribute Names
      //
      const string uarfcnUl = "uarfcnUl";
      const string uarfcnDl = "uarfcnDl";
      const string primaryScramblingCode = "primaryScramblingCode";
      const string primaryCpichPower = "primaryCpichPower";
      const string qqualMin = "qqualMin";
      const string cellCapabilityContainerFDD = "cellCapabilityContainerFDD";
      const string txDiversityIndicator = "txDiversityIndicator";
      const string temporaryOffset1 = "temporaryOffset1";
      const string temporaryOffset2 = "temporaryOffset2";
      const string sttdSupportIndicator = "sttdSupportIndicator";
      const string closedLoopMode1SupportIndicator = "closedLoopMode1SupportIndicator";
   };
   /**
    *  Definitions for MO class ExternalUtranCellTDD
    */
   interface ExternalUtranCellTDD : ExternalUtranGenericCell
   {
      const string CLASS = "ExternalUtranCellTDD";
      // Attribute Names
      //
      const string uarfcn = "uarfcn";
      const string cellParameterId = "cellParameterId";
      const string primaryCcpchPower = "primaryCcpchPower";
      const string cellCapabilityContainerTDD = "cellCapabilityContainerTDD";
      const string sctdIndicator = "sctdIndicator";
      const string dpchConstantValue = "dpchConstantValue";
   };
   /**
    *  Definitions for MO class ExternalUtranCellTDDHcr
    */
   interface ExternalUtranCellTDDHcr : ExternalUtranCellTDD
   {
      const string CLASS = "ExternalUtranCellTDDHcr";
      // Attribute Names
      //
      const string temporaryOffset1 = "temporaryOffset1";
      const string syncCase = "syncCase";
      const string timeSlotForSch = "timeSlotForSch";
      const string schTimeSlot = "schTimeSlot";
      const string timeSlotHCRList = "timeSlotHCRList";
   };
   /**
    *  Definitions for MO class ExternalUtranCellTDDLcr
    */
   interface ExternalUtranCellTDDLcr : ExternalUtranCellTDD
   {
      const string CLASS = "ExternalUtranCellTDDLcr";
      // Attribute Names
```

```
        //
        const string tstdIndicator = "tstdIndicator";
        const string timeSlotLCRList = "timeSlotLCRList";
     };

/**
     *  Definitions for MO class EP_IuCS
     */

     interface EP_IuCS : GenericNetworkResourcesNRMDefs::EP_RP
     {
        const string CLASS = "EP_IuCS";
        // Attribute Name
        //
        const string connMscNumber = "connMscNumber";
     };

/**
     *  Definitions for MO class EP_IuPS
     */

     interface EP_IuPS : GenericNetworkResourcesNRMDefs::EP_RP
     {
        const string CLASS = "EP_IuPS";
        // Attribute Name
        //
        const string connSgsnNumber= "connSgsnNumber";
     };

/**
     *  Definitions for MO class EP_Iur
     */

     interface EP_Iur : GenericNetworkResourcesNRMDefs::EP_RP
     {
        const string CLASS = "EP_Iur";
        // Attribute Name
        //
        const string connectedRncId= "connectedRncId";
     };

};

/**
    *  This module adds datatype definitions for both FDD and TDD mode
    *  attributes used in the NRM which are not the basic datatypes
    *  already defined in CORBA.
    */
module GenericNRMAttributeTypes
{
      enum CellModeEnumType
      {
         FDDMode,
         TDDMode_1_28Mcps,
         TDDMode_3_84Mcps
      };
      enum RestrictionStateEnumType
      {
       cellReservedForOperatorUse,
       cellAccessible
      };
      enum DpcModeChangeEnumType
      {
       dpcModeChange_supported,
       dpcModeChange_not_supported
      };
      typedef long SNAC;
      struct snaInformationType
      {
       long mcc;
       long mnc;
       sequence<SNAC> snaList;
      };

      struct TceIDMappingInfo
      {
       short tceID;
       string tceIPAddr;
```

```
      };
    typedef sequence<TceIDMappingInfo> TceIDMappingInfoListType;
};
    /**
     *  This module adds datatype definitions for FDD mode attributes
     *  used in the NRM which are not the basic datatypes already defined
     *  in CORBA.
     */
    module FDDNRMAttributeTypes
    {
       enum SttdSupportEnumType
       {
        active,
        inactive
       };

       enum txDiversityIndicatorEnumType
       {
        none,
        primaryCpichBroadcastFrom2Antennas,
        sttdAppliedToPrimaryCCPCH,
        tstdAppliedToPrimarySchAndSecondarySch
       };
       enum ClosedLoopMode1EnumType
       {
        closedLoopMode1_supported,
        closedLoopMode1_not_supported
       };

       typedef octet CellCapabilityContainerFDDBit;
       //CellCapabilityContainerFDDBits:
        const unsigned long Flexible_Hard_Split_Support_Indicator = 0;
        const unsigned long Delayed_Activation_Support_Indicator = 1;
        const unsigned long HS_DSCH_Support_Indicator = 2;
        const unsigned long DSCH_Support_Indicator = 3;
        const unsigned long F_DPCH_Support_Indicator = 4;
        const unsigned long E_DCH_Support_Indicator = 5;
        const unsigned long E_DCH_TTI2ms_Support_Indicator = 6;
        const unsigned long E_DCH_2sf2and2sf4_and_all_inferior_SFs_Support_Indicator = 7;
        const unsigned long E_DCH_2sf2_and_all_inferior_SFs_Support_Indicator = 8;
        const unsigned long E_DCH_2sf4_and_all_inferior_SFs_Support_Indicator = 9;
        const unsigned long E_DCH_sf4_and_all_inferior_SFs_Support_Indicator = 10;
        const unsigned long E_DCH_sf8_and_all_inferior_SFs_Support_Indicator = 11;
        const unsigned long E_DCH_HARQ_IR_Combining_Support_Indicator = 12;
        const unsigned long E_DCH_HARQ_Chase_Combining_Support_Indicator = 13;
       typedef sequence <CellCapabilityContainerFDDBit> CellCapabilityContainerFDDType;

     };

     /**
     *  This module adds datatype definitions for TDD mode attributes
     *  used in the NRM which are not the basic datatypes already defined
     *  in CORBA.
     */
    module TDDNRMAttributeTypes
    {
       enum ActivityStatusType
       {
        active,
        inactive
       };
       typedef ActivityStatusType TstdIndicatorEnumType;
       typedef ActivityStatusType SctdSupportEnumType;
       typedef ActivityStatusType TimeSlotStatusType;

       typedef octet CellCapabilityContainerTDDBit;
        const unsigned long Delayed_Activation_Support_Indicator = 0;
        const unsigned long HS_DSCH_Support_Indicator = 1;
        const unsigned long DSCH_Support_Indicator = 2;
       typedef sequence <CellCapabilityContainerTDDBit> CellCapabilityContainerTDDType;

       enum TimeSlotDirectionType
       {
          UL,
          DL
       };

       struct TimeSlotConfigStructType
       {
```

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```
        short timeSlotId;
        TimeSlotDirectionType timeSlotDirection;
        TimeSlotStatusType timeSlotStatus;
    };
    typedef sequence<TimeSlotConfigStructType> TimeSlotListConfigStructType;

    struct UarfcnLCRConfigStructType
    {
        short uarfcn;
        TimeSlotListConfigStructType timeSlotLCRList;
    };
    typedef sequence<UarfcnLCRConfigStructType> UarfcnLCRListConfigStructType;
};
#endif //_UTRANNETWORKRESOURCESNRMDEFS_IDL_
```

Annex B (normative): XML Definitions

This annex contains the XML Definitions for the UTRAN NRM IRP as it applies to Itf-N, in accordance with UTRAN NRM IRP IS definitions [4].

B.1 Architectural features

The overall architectural feature of UTRAN Network Resources IRP is specified in 3GPP TS 32.642 [4].
This clause specifies features that are specific to the Schema definitions.

B.1.1 Syntax for Distinguished Names

The syntax of a Distinguished Name is defined in 3GPP TS 32.300 [5].

B.2 Mapping

B.2.1 General mapping

An IOC maps to an XML element of the same name as the IOC's name in the IS. An IOC attribute maps to a sub-element of the corresponding IOC's XML element, and the name of this sub-element is the same as the attribute's name in the IS.

B.2.2 Information Object Class (IOC) mapping

Not present in the current version of this specification.

B.3 Solution Set definitions

B.3.1 XML definition structure

The overall description of the file format of configuration data XML files is provided by 3GPP TS 32.616 [7].

Annex B.3.3 of the present document defines the NRM-specific XML schema `utranNrm.xsd` for the UTRAN Network Resources IRP NRM defined in 3GPP TS 32.642 [4].

XML schema `utranNrm.xsd` explicitly declares NRM-specific XML element types for the related NRM.

The definition of those NRM-specific XML element types complies with the generic mapping rules defined in 3GPP TS 32.616 [7].

B.3.2 Graphical Representation

Not present in the current version of this specification.

B.3.3   XML schema "utranNrm.xsd"

```
<?xml version="1.0" encoding="UTF-8"?>

<!--
  3GPP TS 32.646 UTRAN Network Resources IRP
  Bulk CM Configuration data file NRM-specific XML schema
  utranNrm.xsd
-->

<schema
  targetNamespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.646#utranNrm"
  elementFormDefault="qualified"
  xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.626#genericNrm"
  xmlns:un=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.646#utranNrm"
  xmlns:gn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.656#geranNrm"
  xmlns:sm=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.676#stateManagementIRP"
>

  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.626#genericNrm"
  />
  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.656#geranNrm"
  />
  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.676#stateManagementIRP"
  />

  <!-- UTRAN Network Resources IRP NRM attribute related XML types -->

  <simpleType name="localCellId">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="268435455"/>
    </restriction>
  </simpleType>

  <simpleType name="cId">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="65535"/>
    </restriction>
  </simpleType>

  <simpleType name="uarfcnAnyMode">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="16383"/>
    </restriction>
  </simpleType>

  <simpleType name="primaryScramblingCode">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="511"/>
    </restriction>
  </simpleType>

  <simpleType name="primaryCpichPower">
    <restriction base="decimal">
      <fractionDigits value="1"/>
      <minInclusive value="-10"/>
      <maxInclusive value="+50"/>
    </restriction>
  </simpleType>
```

```xml
<simpleType name="maximumTransmissionPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="0"/>
    <maxInclusive value="50"/>
  </restriction>
</simpleType>

<simpleType name="primarySchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-35"/>
    <maxInclusive value="+15"/>
  </restriction>
</simpleType>

<simpleType name="secondarySchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-35"/>
    <maxInclusive value="+15"/>
  </restriction>
</simpleType>

<simpleType name="bchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-35"/>
    <maxInclusive value="+15"/>
  </restriction>
</simpleType>

<simpleType name="aichPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-22"/>
    <maxInclusive value="+5"/>
  </restriction>
</simpleType>

<simpleType name="fpachPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-150"/>
    <maxInclusive value="+400"/>
  </restriction>
</simpleType>

<simpleType name="pichPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-10"/>
    <maxInclusive value="+5"/>
  </restriction>
</simpleType>

<simpleType name="pchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-350"/>
    <maxInclusive value="+150"/>
  </restriction>
</simpleType>

<simpleType name="fachPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-350"/>
    <maxInclusive value="+150"/>
  </restriction>
</simpleType>

<simpleType name="lac">
  <union>
    <simpleType>
      <restriction base="integer">
        <minInclusive value="1"/>
        <maxInclusive value="65533"/>
```

```
          </restriction>
        </simpleType>
        <simpleType>
          <restriction base="integer">
            <minInclusive value="65535"/>
            <maxInclusive value="65535"/>
          </restriction>
        </simpleType>
      </union>
</simpleType>

<simpleType name="rac">
  <restriction base="integer">
    <minInclusive value="0"/>
    <maxInclusive value="255"/>
  </restriction>
</simpleType>

<simpleType name="sac">
  <restriction base="integer">
    <minInclusive value="0"/>
    <maxInclusive value="65535"/>
  </restriction>
</simpleType>

<complexType name="uraList">
  <sequence>
    <element name="ura" maxOccurs="8">
      <simpleType>
        <restriction base="integer">
          <minInclusive value="0"/>
          <maxInclusive value="65535"/>
        </restriction>
      </simpleType>
    </element>
  </sequence>
</complexType>

<simpleType name="cellMode">
  <restriction base="string">
    <enumeration value="FDDMode"/>
    <enumeration value="3-84McpsTDDMode"/>
    <enumeration value="1-28McpsTDDMode"/>
  </restriction>
</simpleType>

<simpleType name="cellParameterId">
  <restriction base="integer">
    <minInclusive value="0"/>
    <maxInclusive value="127"/>
  </restriction>
</simpleType>

<simpleType name="primaryCcpchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-15"/>
    <maxInclusive value="+40"/>
  </restriction>
</simpleType>

<simpleType name="dwPchPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-15"/>
    <maxInclusive value="+40"/>
  </restriction>
</simpleType>

<simpleType name="schPower">
  <restriction base="decimal">
    <fractionDigits value="1"/>
    <minInclusive value="-35"/>
    <maxInclusive value="+15"/>
  </restriction>
</simpleType>

<complexType name="timeSlotLCRList">
```

```
      <sequence>
        <element name="timeSlot" maxOccurs="7">
          <complexType>
            <all>
              <element name="timeSlotId" minOccurs="1">
                <simpleType>
                  <restriction base="integer">
                    <minInclusive value="0"/>
                    <maxInclusive value="6"/>
                  </restriction>
                </simpleType>
              </element>
              <element name="timeSlotDirection" minOccurs="1">
                <simpleType>
                  <restriction base="string">
                    <enumeration value="UL"/>
                    <enumeration value="DL"/>
                  </restriction>
                </simpleType>
              </element>
              <element name="timeSlotStatus" minOccurs="1">
                <simpleType>
                  <restriction base="string">
                    <enumeration value="Active"/>
                    <enumeration value="Not-Active"/>
                  </restriction>
                </simpleType>
              </element>
            </all>
          </complexType>
        </element>
      </sequence>
  </complexType>

  <complexType name="timeSlotHCRList">
    <sequence>
      <element name="timeSlot" maxOccurs="15">
        <complexType>
          <all>
            <element name="timeSlotId" minOccurs="1">
              <simpleType>
                <restriction base="integer">
                  <minInclusive value="0"/>
                  <maxInclusive value="14"/>
                </restriction>
              </simpleType>
            </element>
            <element name="timeSlotDirection" minOccurs="1">
              <simpleType>
                <restriction base="string">
                  <enumeration value="UL"/>
                  <enumeration value="DL"/>
                </restriction>
              </simpleType>
            </element>
            <element name="timeSlotStatus" minOccurs="1">
              <simpleType>
                <restriction base="string">
                  <enumeration value="Active"/>
                  <enumeration value="Not-Active"/>
                </restriction>
              </simpleType>
            </element>
          </all>
        </complexType>
      </element>
    </sequence>
  </complexType>

  <simpleType name="restrictionStateIndicator">
    <restriction base="string">
      <enumeration value="cellReservedForOperatorUse"/>
      <enumeration value="cellAccessible"/>
    </restriction>
  </simpleType>

  <simpleType name="dpcModeChangeSupport">
    <restriction base="string">
```

```
        <enumeration value="dpcModeChangeSupported"/>
        <enumeration value="dpcModeChangeNotSupported"/>
      </restriction>
  </simpleType>

  <simpleType name="sttdSupport">
    <restriction base="string">
      <enumeration value="active"/>
      <enumeration value="inactive"/>
     </restriction>
  </simpleType>

  <simpleType name="closedLoopMode1">
    <restriction base="string">
      <enumeration value="closedLoopMode1Supported"/>
      <enumeration value="closedLoopMode1NotSupported"/>
    </restriction>
  </simpleType>

  <simpleType name="frameOffset">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="255"/>
    </restriction>
  </simpleType>

  <simpleType name="cellIndividualOffset">
    <restriction base="decimal">
      <fractionDigits value="1"/>
      <minInclusive value="-10"/>
      <maxInclusive value="10"/>
    </restriction>
  </simpleType>

  <simpleType name="hcsPrio">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="7"/>
    </restriction>
  </simpleType>

  <simpleType name="maximumAllowedUlTxPower">
    <restriction base="integer">
      <minInclusive value="-50"/>
      <maxInclusive value="33"/>
    </restriction>
  </simpleType>

  <simpleType name="qrxlevMin">
    <restriction base="integer">
      <minInclusive value="-115"/>
      <maxInclusive value="-25"/>
    </restriction>
  </simpleType>

  <simpleType name="deltaQrxlevmin">
    <restriction base="integer">
      <minInclusive value="-4"/>
      <maxInclusive value="-2"/>
    </restriction>
  </simpleType>

  <simpleType name="qhcs">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="99"/>
    </restriction>
  </simpleType>

  <simpleType name="penaltyTime">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="60"/>
    </restriction>
  </simpleType>

  <simpleType name="referenceTimeDifferenceToCell">
    <restriction base="integer">
```

```
        <minInclusive value="0"/>
        <maxInclusive value="38400"/>
      </restriction>
</simpleType>

<simpleType name="readSFNIndicator">
  <restriction base="string">
    <enumeration value="TRUE"/>
    <enumeration value="FALSE"/>
  </restriction>
</simpleType>

<complexType name="snaList">
  <sequence>
    <element name="snac" maxOccurs="65535">
      <simpleType>
        <restriction base="integer">
          <minInclusive value="1"/>
          <maxInclusive value="65536"/>
        </restriction>
      </simpleType>
    </element>
  </sequence>
</complexType>

<complexType name="snaInformation">
  <sequence>
    <element name="mcc">
      <simpleType>
        <restriction base="integer">
          <minInclusive value="0"/>
          <maxInclusive value="999"/>
        </restriction>
      </simpleType>
    </element>
    <element name="mnc">
      <simpleType>
        <restriction base="integer">
          <enumeration value="0"/>
          <enumeration value="999"/>
        </restriction>
      </simpleType>
    </element>
    <element name="snaList" type="un:snaList"/>
  </sequence>
</complexType>

<simpleType name="qqualMin">
  <restriction base="integer">
    <minInclusive value="-24"/>
    <maxInclusive value="0"/>
  </restriction>
</simpleType>

<simpleType name="temporaryOffset1">
  <restriction base="integer">
    <minInclusive value="3"/>
    <maxInclusive value="21"/>
  </restriction>
</simpleType>

<simpleType name="temporaryOffset2">
  <restriction base="integer">
    <minInclusive value="2"/>
    <maxInclusive value="12"/>
  </restriction>
</simpleType>

<simpleType name="txDiversityIndicator">
  <restriction base="string">
    <enumeration value="none"/>
    <enumeration value="PrimaryCpichBroadcastFrom2Antennas"/>
    <enumeration value="SttdAppliedToPrimaryCCPCH"/>
    <enumeration value="TstdAppliedToPrimarySchAndSecondarySch"/>
  </restriction>
</simpleType>
```

```
<complexType name="cellCapabilityContainerFDD">
  <complexContent>
    <extension base="xn:NrmClass">
      <sequence>
        <element name="attributes" minOccurs="0">
          <complexType>
            <all>
              <element name="Flexible_Hard_Split_Support_Indicator" minOccurs="0"/>
              <element name="Delayed_Activation_Support_Indicator" minOccurs="0"/>
              <element name="HS_DSCH_Support_Indicator" minOccurs="0"/>
              <element name="DSCH_Support_Indicator" minOccurs="0"/>
              <element name="F_DPCH_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_TTI2ms_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_2sf2_and_all_inferior_SFs_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_2sf4_and_all_inferior_SFs_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_sf4_and_all_inferior_SFs_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_sf8_and_all_inferior_SFs_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_HARQ_IR_Combining_Support_Indicator" minOccurs="0"/>
              <element name="E_DCH_HARQ_Chase_Combining_Support_Indicator" minOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>

<simpleType name="sctdIndicator">
  <restriction base="string">
    <enumeration value="active"/>
    <enumeration value="inactive"/>
  </restriction>
</simpleType>

<simpleType name="dpchConstantValue">
  <restriction base="integer">
    <minInclusive value="-10"/>
    <maxInclusive value="10"/>
  </restriction>
</simpleType>

<complexType name="cellCapabilityContainerTDD">
  <complexContent>
    <extension base="xn:NrmClass">
      <sequence>
        <element name="attributes" minOccurs="0">
          <complexType>
            <all>
              <element name="Delayed_Activation_Support_Indicator" minOccurs="0"/>
              <element name="HS_DSCH_Support_Indicator" minOccurs="0"/>
              <element name="DSCH_Support_Indicator" minOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>

<simpleType name="tstdIndicator">
  <restriction base="string">
    <enumeration value="active"/>
    <enumeration value="inactive"/>
  </restriction>
</simpleType>

<simpleType name="timeSlotForSch">
  <restriction base="integer">
    <minInclusive value="0"/>
    <maxInclusive value="14"/>
```

```
      </restriction>
    </simpleType>

    <simpleType name="schTimeSlot">
      <restriction base="integer">
        <minInclusive value="0"/>
        <maxInclusive value="6"/>
      </restriction>
    </simpleType>

    <simpleType name="syncCase">
      <restriction base="string">
        <enumeration value="SCH and PCCPCH allocated in a single TS"/>
        <enumeration value="SCH and PCCPCH allocated in two TS, TS#k and TS#k+8"/>
      </restriction>
    </simpleType>

    <simpleType name="hsFlag">
      <restriction base="integer">
        <minInclusive value="0"/>
        <maxInclusive value="1"/>
      </restriction>
    </simpleType>

    <simpleType name="hsEnable">
      <restriction base="integer">
        <minInclusive value="0"/>
        <maxInclusive value="1"/>
      </restriction>
    </simpleType>

    <simpleType name="numOfHspdschs">
      <restriction base="integer">
        <minInclusive value="0"/>
        <maxInclusive value="95"/>
      </restriction>
    </simpleType>

    <simpleType name="numOfHsscchs">
      <restriction base="integer">
        <minInclusive value="1"/>
        <maxInclusive value="32"/>
      </restriction>
    </simpleType>

    <simpleType name="eightOctets">
      <restriction base="hexBinary">
        <length value="8"/>
      </restriction>
    </simpleType>

    <complexType name="uarfcnLCRList">
      <sequence>
        <element name="uarfcnLCR" maxOccurs="11">
          <complexType>
            <all>
              <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="1"/>
              <element name="timeSlotLCRList" type="un:timeSlotLCRList" minOccurs="0"/>
            </all>
          </complexType>
        </element>
      </sequence>
    </complexType>

<simpleType name="siptoSupported">
    <restriction base="integer">
      <minInclusive value="0"/>
      <maxInclusive value="1"/>
    </restriction>
  </simpleType>

  <complexType name="TceIDMappingInfo">
    <sequence>
      <element name="tceID" type="short"/>
      <element name="tceIPAddr" type="string"/>
    </sequence>
  </complexType>
  <complexType name="TceIDMappingInfoList">
```

```
    <sequence>
      <element name="tceIDMappingInfo" type="en:TceIDMappingInfo" minOccurs="0"/>
    </sequence>
  </complexType>

  <!-- UTRAN Network Resources IRP NRM class associated XML elements -->

  <element
    name="RncFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" type="string" minOccurs="0"/>
                  <element name="mcc" type="string" minOccurs="0"/>
                  <element name="mnc" type="string" minOccurs="0"/>
                  <element name="rncId" type="string" minOccurs="0"/>
                  <element name="siptoSupported" type= "un:siptoSupported">
                  <element name="tceIDMappingInfoList" type="un:TceIDMappingInfoList"
minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="un:UtranCellFDD"/>
              <element ref="un:UtranCellTDDLcr"/>
              <element ref="un:UtranCellTDDHcr"/>
              <element ref="un:IubLink"/>
              <element ref="un:RncFunctionOptionallyContainedNrmClass"/>
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

  <element
    name="NodeBFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" type="string" minOccurs="0"/>
                  <element name="nodeBFunctionIubLink" type="string" minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="un:NodeBFunctionOptionallyContainedNrmClass"/>
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

  <element name="UtranGenericCell" abstract="true">
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" type="string" minOccurs="0"/>
                  <element name="cId" type="un:cId" minOccurs="0"/>
```

```
                    <element name="localCellId" type="un:localCellId" minOccurs="0"/>
                    <element name="maximumTransmissionPower"
                            type="un:maximumTransmissionPower" minOccurs="0"/>
                    <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                    <element name="pichPower" type="un:pichPower" minOccurs="0"/>
                    <element name="pchPower" type="un:pchPower" minOccurs="0"/>
                    <element name="fachPower" type="un:fachPower" minOccurs="0"/>
                    <element name="lac" type="un:lac" minOccurs="0"/>
                    <element name="rac" type="un:rac" minOccurs="0"/>
                    <element name="sac" type="un:sac" minOccurs="0"/>
                    <element name="uraList" type="un:uraList" minOccurs="0"/>
                    <element name="utranCellIubLink" type="xn:dn" minOccurs="0"/>
                    <element name="relatedAntennaList" type="xn:dnList" minOccurs="0"/>
                    <element name="relatedTmaList" type="xn:dnList" minOccurs="0"/>
                    <element name="operationalState"
                            type="sm:operationalStateType" minOccurs="0"/>
                    <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                    <element name="hsEnable" type="un:hsEnable" minOccurs="0"/>
                    <element name="numOfHspdschs" type="un:numOfHspdschs" minOccurs="0"/>
                    <element name="numOfHsscchs" type="un:numOfHsscchs" minOccurs="0"/>
                    <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                    <element name="cellIndividualOffset"
                            type="un:cellIndividualOffset" minOccurs="0"/>
                    <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                    <element name="maximumAllowedUlTxPower"
                            type="un:maximumAllowedUlTxPower" minOccurs="0"/>
                    <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                    <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                    <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                    <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                    <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                    <element name="referenceTimeDifferenceToCell"
                            type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                    <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                    <element name="restrictionStateIndicator"
                            type="un:restrictionStateIndicator" minOccurs="0"/>
                    <element name="dpcModechangeSupportIndicator"
                            type="un:dpcModeChangeSupport" minOccurs="0"/>
                    <element name="relatedSectorEquipment" type="xn:dn" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
              <choice minOccurs="0" maxOccurs="unbounded">
                <element ref="un:UtranRelation"/>
                <element ref="gn:GsmRelation"/>
                <element ref="un:UtranGenericCellOptionallyContainedNrmClass"/>
                <element ref="xn:VsDataContainer"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>

    <element name="UtranCellFDD">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClass">
            <sequence>
              <element name="attributes" minOccurs="0">
                <complexType>
                  <all>

                    <!-- Inherited attributes from UtranGenericCell -->
                    <element name="userLabel" type="string" minOccurs="0"/>
                    <element name="cId" type="un:cId" minOccurs="0"/>
                    <element name="localCellId" type="un:localCellId" minOccurs="0"/>
                    <element name="maximumTransmissionPower"
                            type="un:maximumTransmissionPower" minOccurs="0"/>
                    <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                    <element name="pichPower" type="un:pichPower" minOccurs="0"/>
                    <element name="pchPower" type="un:pchPower" minOccurs="0"/>
                    <element name="fachPower" type="un:fachPower" minOccurs="0"/>
                    <element name="lac" type="un:lac" minOccurs="0"/>
                    <element name="rac" type="un:rac" minOccurs="0"/>
                    <element name="sac" type="un:sac" minOccurs="0"/>
                    <element name="uraList" type="un:uraList" minOccurs="0"/>
                    <element name="utranCellIubLink" type="xn:dn" minOccurs="0"/>
```

```
                        <element name="relatedAntennaList" type="xn:dnList" minOccurs="0"/>
                        <element name="relatedTmaList" type="xn:dnList" minOccurs="0"/>
                        <element name="operationalState"
                                type="sm:operationalStateType" minOccurs="0"/>
                        <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                        <element name="hsEnable" type="un:hsEnable" minOccurs="0"/>
                        <element name="numOfHspdschs" type="un:numOfHspdschs" minOccurs="0"/>
                        <element name="numOfHsscchs" type="un:numOfHsscchs" minOccurs="0"/>
                        <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                        <element name="cellIndividualOffset"
                                type="un:cellIndividualOffset" minOccurs="0"/>
                        <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                        <element name="maximumAllowedUlTxPower"
                                type="un:maximumAllowedUlTxPower" minOccurs="0"/>
                        <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                        <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                        <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                        <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                        <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                        <element name="referenceTimeDifferenceToCell"
                                type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                        <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                        <element name="restrictionStateIndicator"
                                type="un:restrictionStateIndicator" minOccurs="0"/>
                        <element name="dpcModechangeSupportIndicator"
                                type="un:dpcModeChangeSupport" minOccurs="0"/>
                        <element name="relatedSectorEquipment" type="xn:dn" minOccurs="0"/>
                        <!-- End of inherited attributes from UtranGenericCell -->

                        <element name="uarfcnUl" type="un:uarfcnAnyMode" minOccurs="0"/>
                        <element name="uarfcnDl" type="un:uarfcnAnyMode" minOccurs="0"/>
                        <element name="primaryScramblingCode" type="un:primaryScramblingCode"
                                minOccurs="0"/>
                        <element name="primaryCpichPower" type="un:primaryCpichPower" minOccurs="0"/>
                        <element name="primarySchPower" type="un:primarySchPower" minOccurs="0"/>
                        <element name="secondarySchPower" type="un:secondarySchPower" minOccurs="0"/>
                        <element name="bchPower" type="un:bchPower" minOccurs="0"/>
                        <element name="aichPower" type="un:aichPower" minOccurs="0"/>
                        <element name="qqualMin" type="un:qqualMin" minOccurs="0"/>
                        <element name="cellCapabilityContainerFDD" type="un:cellCapabilityContainerFDD"
                                minOccurs="0"/>
                        <element name="txDiversityIndicator" type="un:txDiversityIndicator"
                                minOccurs="0"/>
                        <element name="temporaryOffset1" type="un:temporaryOffset1" minOccurs="0"/>
                        <element name="temporaryOffset2" type="un:temporaryOffset2" minOccurs="0"/>
                        <element name="sttdSupportIndicator" type="un:sttdSupport" minOccurs="0"/>
                        <element name="closedLoopModelSupportIndicator" type="un:closedLoopMode1"
                                minOccurs="0"/>
                    </all>
                  </complexType>
                </element>
                <choice minOccurs="0" maxOccurs="unbounded">
                  <element ref="un:UtranRelation"/>
                  <element ref="gn:GsmRelation"/>
                  <element ref="un:UtranCellFDDOptionallyContainedNrmClass"/>
                  <element ref="xn:VsDataContainer"/>
                </choice>
              </sequence>
            </extension>
          </complexContent>
        </complexType>
      </element>

    <element name="UtranCellTDD" abstract="true">
        <complexType>
          <complexContent>
            <extension base="xn:NrmClass">
              <sequence>
                <element name="attributes" minOccurs="0">
                  <complexType>
                    <all>

                        <!-- Inherited attributes from UtranGenericCell -->
                        <element name="userLabel" type="string" minOccurs="0"/>
                        <element name="cId" type="un:cId" minOccurs="0"/>
                        <element name="localCellId" type="un:localCellId" minOccurs="0"/>
                        <element name="maximumTransmissionPower"
                                type="un:maximumTransmissionPower" minOccurs="0"/>
```

```
                        <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                        <element name="pichPower" type="un:pichPower" minOccurs="0"/>
                        <element name="pchPower" type="un:pchPower" minOccurs="0"/>
                        <element name="fachPower" type="un:fachPower" minOccurs="0"/>
                        <element name="lac" type="un:lac" minOccurs="0"/>
                        <element name="rac" type="un:rac" minOccurs="0"/>
                        <element name="sac" type="un:sac" minOccurs="0"/>
                        <element name="uraList" type="un:uraList" minOccurs="0"/>
                        <element name="utranCellIubLink" type="xn:dn" minOccurs="0"/>
                        <element name="relatedAntennaList" type="xn:dnList" minOccurs="0"/>
                        <element name="relatedTmaList" type="xn:dnList" minOccurs="0"/>
                        <element name="operationalState"
                                type="sm:operationalStateType" minOccurs="0"/>
                        <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                        <element name="hsEnable" type="un:hsEnable" minOccurs="0"/>
                        <element name="numOfHspdschs" type="un:numOfHspdschs" minOccurs="0"/>
                        <element name="numOfHsscchs" type="un:numOfHsscchs" minOccurs="0"/>
                        <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                        <element name="cellIndividualOffset"
                                type="un:cellIndividualOffset" minOccurs="0"/>
                        <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                        <element name="maximumAllowedUlTxPower"
                                type="un:maximumAllowedUlTxPower" minOccurs="0"/>
                        <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                        <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                        <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                        <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                        <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                        <element name="referenceTimeDifferenceToCell"
                                type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                        <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                        <element name="restrictionStateIndicator"
                                type="un:restrictionStateIndicator" minOccurs="0"/>
                        <element name="dpcModechangeSupportIndicator"
                                type="un:dpcModeChangeSupport" minOccurs="0"/>
                        <element name="relatedSectorEquipment" type="xn:dn" minOccurs="0"/>
                      <!-- End of inherited attributes from UtranGenericCell -->

                        <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                        <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                        <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                        <element name="cellCapabilityContainerTDD" type="un:cellCapabilityContainerTDD"
                                minOccurs="0"/>
                        <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                        <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                      </all>
                    </complexType>
                  </element>
                  <choice minOccurs="0" maxOccurs="unbounded">
                    <element ref="un:UtranRelation"/>
                    <element ref="gn:GsmRelation"/>
                    <element ref="un:UtranCellTDDOptionallyContainedNrmClass"/>
                    <element ref="xn:VsDataContainer"/>
                  </choice>
                </sequence>
              </extension>
            </complexContent>
          </complexType>
        </element>

    <element name="UtranCellTDDLcr">
        <complexType>
          <complexContent>
            <extension base="xn:NrmClass">
              <sequence>
                <element name="attributes" minOccurs="0">
                  <complexType>
                    <all>

                        <!-- Inherited attributes from UtranGenericCell via UtranCellTDD -->
                        <element name="userLabel" type="string" minOccurs="0"/>
                        <element name="cId" type="un:cId" minOccurs="0"/>
                        <element name="localCellId" type="un:localCellId" minOccurs="0"/>
                        <element name="maximumTransmissionPower"
                                type="un:maximumTransmissionPower" minOccurs="0"/>
                        <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                        <element name="pichPower" type="un:pichPower" minOccurs="0"/>
                        <element name="pchPower" type="un:pchPower" minOccurs="0"/>
```

```
                    <element name="fachPower" type="un:fachPower" minOccurs="0"/>
                    <element name="lac" type="un:lac" minOccurs="0"/>
                    <element name="rac" type="un:rac" minOccurs="0"/>
                    <element name="sac" type="un:sac" minOccurs="0"/>
                    <element name="uraList" type="un:uraList" minOccurs="0"/>
                    <element name="utranCellIubLink" type="xn:dn" minOccurs="0"/>
                    <element name="relatedAntennaList" type="xn:dnList" minOccurs="0"/>
                    <element name="relatedTmaList" type="xn:dnList" minOccurs="0"/>
                    <element name="operationalState"
                            type="sm:operationalStateType" minOccurs="0"/>
                    <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                    <element name="hsEnable" type="un:hsEnable" minOccurs="0"/>
                    <element name="numOfHspdschs" type="un:numOfHspdschs" minOccurs="0"/>
                    <element name="numOfHsscchs" type="un:numOfHsscchs" minOccurs="0"/>
                    <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                    <element name="cellIndividualOffset"
                            type="un:cellIndividualOffset" minOccurs="0"/>
                    <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                    <element name="maximumAllowedUlTxPower"
                            type="un:maximumAllowedUlTxPower" minOccurs="0"/>
                    <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                    <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                    <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                    <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                    <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                    <element name="referenceTimeDifferenceToCell"
                            type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                    <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                    <element name="restrictionStateIndicator"
                            type="un:restrictionStateIndicator" minOccurs="0"/>
                    <element name="dpcModechangeSupportIndicator"
                            type="un:dpcModeChangeSupport" minOccurs="0"/>
                    <element name="relatedSectorEquipment" type="xn:dn" minOccurs="0"/>
                    <!-- End of inherited attributes from UtranGenericCell via UtranCellTDD -->

                    <!-- Inherited attributes from UtranCellTDD -->
                    <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                    <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                    <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                    <element name="cellCapabilityContainerTDD" type="un:cellCapabilityContainerTDD"
                            minOccurs="0"/>
                    <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                    <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                    <!-- End of inherited attributes from UtranCellTDD -->

                    <element name="uarfcnLCRList" type="un:uarfcnLCRList" minOccurs="0"/>
                    <element name="fpachPower" type="un:fpachPower" minOccurs="0"/>
                    <element name="dwPchPower" type="un:dwPchPower" minOccurs="0"/>
                    <element name="tstdIndicator" type="un:tstdIndicator" minOccurs="0"/>
                    <element name="timeSlotLCRList" type="un:timeSlotLCRList" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
              <choice minOccurs="0" maxOccurs="unbounded">
                <element ref="un:UtranRelation"/>
                <element ref="gn:GsmRelation"/>
                <element ref="un:UtranCellTDDLcrOptionallyContainedNrmClass"/>
                <element ref="xn:VsDataContainer"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>

    <element name="UtranCellTDDHcr">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClass">
            <sequence>
              <element name="attributes" minOccurs="0">
                <complexType>
                  <all>

                    <!-- Inherited attributes from UtranGenericCell via UtranCellTDD -->
                    <element name="userLabel" type="string" minOccurs="0"/>
                    <element name="cId" type="un:cId" minOccurs="0"/>
                    <element name="localCellId" type="un:localCellId" minOccurs="0"/>
```

```
                    <element name="maximumTransmissionPower"
                             type="un:maximumTransmissionPower" minOccurs="0"/>
                    <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                    <element name="pichPower" type="un:pichPower" minOccurs="0"/>
                    <element name="pchPower" type="un:pchPower" minOccurs="0"/>
                    <element name="fachPower" type="un:fachPower" minOccurs="0"/>
                    <element name="lac" type="un:lac" minOccurs="0"/>
                    <element name="rac" type="un:rac" minOccurs="0"/>
                    <element name="sac" type="un:sac" minOccurs="0"/>
                    <element name="uraList" type="un:uraList" minOccurs="0"/>
                    <element name="utranCellIubLink" type="xn:dn" minOccurs="0"/>
                    <element name="relatedAntennaList" type="xn:dnList" minOccurs="0"/>
                    <element name="relatedTmaList" type="xn:dnList" minOccurs="0"/>
                    <element name="operationalState"
                             type="sm:operationalStateType" minOccurs="0"/>
                    <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                    <element name="hsEnable" type="un:hsEnable" minOccurs="0"/>
                    <element name="numOfHspdschs" type="un:numOfHspdschs" minOccurs="0"/>
                    <element name="numOfHsscchs" type="un:numOfHsscchs" minOccurs="0"/>
                    <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                    <element name="cellIndividualOffset"
                             type="un:cellIndividualOffset" minOccurs="0"/>
                    <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                    <element name="maximumAllowedUlTxPower"
                             type="un:maximumAllowedUlTxPower" minOccurs="0"/>
                    <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                    <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                    <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                    <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                    <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                    <element name="referenceTimeDifferenceToCell"
                             type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                    <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                    <element name="restrictionStateIndicator"
                             type="un:restrictionStateIndicator" minOccurs="0"/>
                    <element name="dpcModechangeSupportIndicator"
                             type="un:dpcModeChangeSupport" minOccurs="0"/>
                    <element name="relatedSectorEquipment" type="xn:dn" minOccurs="0"/>
                    <!-- End of inherited attributes from UtranGenericCell via UtranCellTDD -->

                    <!-- Inherited attributes from UtranCellTDD -->
                    <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                    <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                    <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                    <element name="cellCapabilityContainerTDD" type="un:cellCapabilityContainerTDD"
                             minOccurs="0"/>
                    <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                    <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                    <!-- End of inherited attributes from UtranCellTDD -->

                    <element name="schPower" type="un:schPower" minOccurs="0"/>
                    <element name="temporaryOffset1" type="un:temporaryOffset1" minOccurs="0"/>
                    <element name="syncCase" type="un:syncCase" minOccurs="0"/>
                    <element name="timeSlotForSch" type="un:timeSlotForSch" minOccurs="0"/>
                    <element name="schTimeSlot" type="un:schTimeSlot" minOccurs="0"/>
                    <element name="timeSlotHCRList" type="un:timeSlotHCRList" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
              <choice minOccurs="0" maxOccurs="unbounded">
                <element ref="un:UtranRelation"/>
                <element ref="gn:GsmRelation"/>
                <element ref="un:UtranCellTDDHcrOptionallyContainedNrmClass"/>
                <element ref="xn:VsDataContainer"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>

    <element name="IubLink">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClass">
            <sequence>
              <element name="attributes" minOccurs="0">
                <complexType>
```

```
              <all>
                <element name="userLabel" type="string" minOccurs="0"/>
                <element name="iubLinkUtranCell" type="xn:dnList" minOccurs="0"/>
                <element name="iubLinkATMChannelTerminationPoint" type="xn:dn" minOccurs="0"/>
                <element name="iubLinkNodeBFunction" type="xn:dn" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="un:IubLinkOptionallyContainedNrmClass"/>
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="UtranRelation">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="adjacentCell" type="xn:dn" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="un:UtranRelationOptionallyContainedNrmClass"/>
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="ExternalUtranGenericCell" abstract="true"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" type="string" minOccurs="0"/>
                <element name="cId" type="un:cId" minOccurs="0"/>
                <element name="mcc" type="string" minOccurs="0"/>
                <element name="mnc" type="string" minOccurs="0"/>
                <element name="rncId" type="string" minOccurs="0"/>
                <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                <element name="lac" type="un:lac" minOccurs="0"/>
                <element name="rac" type="un:rac" minOccurs="0"/>
                <element name="controllingRnc" type="xn:dn" minOccurs="0"/>
                <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                <element name="cellIndividualOffset" type="un:cellIndividualOffset"
                        minOccurs="0"/>
                <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                <element name="maximumAllowedUlTxPower" type="un:maximumAllowedUlTxPower"
                        minOccurs="0"/>
                <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                <element name="referenceTimeDifferenceToCell"
                        type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                <element name="restrictionStateIndicator" type="un:restrictionStateIndicator"
                        minOccurs="0"/>
                <element name="dpcModeChangeSupportIndicator"  type="un:dpcModeChangeSupport"
                        minOccurs="0"/>
```

```
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="un:ExternalUtranGenericCellOptionallyContainedNrmClass"/>
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

  <element
    name="ExternalUtranCellFDD"
    substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>

                  <!-- Inherited attributes from ExternalUtranGenericCell -->
                  <element name="userLabel" type="string" minOccurs="0"/>
                  <element name="cId" type="un:cId" minOccurs="0"/>
                  <element name="mcc" type="string" minOccurs="0"/>
                  <element name="mnc" type="string" minOccurs="0"/>
                  <element name="rncId" type="string" minOccurs="0"/>
                  <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                  <element name="lac" type="un:lac" minOccurs="0"/>
                  <element name="rac" type="un:rac" minOccurs="0"/>
                  <element name="controllingRnc" type="xn:dn" minOccurs="0"/>
                  <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                  <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                  <element name="cellIndividualOffset" type="un:cellIndividualOffset"
                          minOccurs="0"/>
                  <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                  <element name="maximumAllowedUlTxPower" type="un:maximumAllowedUlTxPower"
                          minOccurs="0"/>
                  <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                  <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                  <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                  <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                  <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                  <element name="referenceTimeDifferenceToCell"
                          type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                  <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                  <element name="restrictionStateIndicator" type="un:restrictionStateIndicator"
                          minOccurs="0"/>
                  <element name="dpcModeChangeSupportIndicator"  type="un:dpcModeChangeSupport"
                          minOccurs="0"/>
                  <!-- End of inherited attributes from ExternalUtranGenericCell -->

                  <element name="uarfcnUl" type="un:uarfcnAnyMode" minOccurs="0"/>
                  <element name="uarfcnDl" type="un:uarfcnAnyMode" minOccurs="0"/>
                  <element name="primaryScramblingCode" type="un:primaryScramblingCode"
                          minOccurs="0"/>
                  <element name="primaryCpichPower" type="un:primaryCpichPower" minOccurs="0"/>
                  <element name="aichPower" type="un:aichPower" minOccurs="0"/>
                  <element name="qqualMin" type="un:qqualMin" minOccurs="0"/>
                  <element name="cellCapabilityContainerFDD" type="un:cellCapabilityContainerFDD"
                          minOccurs="0"/>
                  <element name="txDiversityIndicator" type="un:txDiversityIndicator"
                          minOccurs="0"/>
                  <element name="temporaryOffset1" type="un:temporaryOffset1" minOccurs="0"/>
                  <element name="temporaryOffset2" type="un:temporaryOffset2" minOccurs="0"/>
                  <element name="sttdSupportIndicator" type="un:sttdSupport" minOccurs="0"/>
                  <element name="closedLoopMode1SupportIndicator" type="un:closedLoopMode1"
                          minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="un:ExternalUtranCellFDDOptionallyContainedNrmClass"/>
              <element ref="xn:VsDataContainer"/>
```

```
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
  </element>

  <element
    name="ExternalUtranCellTDD" abstract="true"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>

                  <!-- Inherited attributes from ExternalUtranGenericCell -->
                  <element name="userLabel" type="string" minOccurs="0"/>
                  <element name="cId" type="un:cId" minOccurs="0"/>
                  <element name="mcc" type="string" minOccurs="0"/>
                  <element name="mnc" type="string" minOccurs="0"/>
                  <element name="rncId" type="string" minOccurs="0"/>
                  <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                  <element name="lac" type="un:lac" minOccurs="0"/>
                  <element name="rac" type="un:rac" minOccurs="0"/>
                  <element name="controllingRnc" type="xn:dn" minOccurs="0"/>
                  <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                  <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                  <element name="cellIndividualOffset" type="un:cellIndividualOffset"
                          minOccurs="0"/>
                  <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                  <element name="maximumAllowedUlTxPower" type="un:maximumAllowedUlTxPower"
                          minOccurs="0"/>
                  <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                  <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                  <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                  <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                  <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                  <element name="referenceTimeDifferenceToCell"
                          type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                  <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                  <element name="restrictionStateIndicator" type="un:restrictionStateIndicator"
                          minOccurs="0"/>
                  <element name="dpcModeChangeSupportIndicator"  type="un:dpcModeChangeSupport"
                          minOccurs="0"/>
                  <!-- End of inherited attributes from ExternalUtranGenericCell -->

                  <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                  <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                  <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                  <element name="cellCapabilityContainerTDD"
                          type="un:cellCapabilityContainerTDD" minOccurs="0"/>
                  <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                  <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="un:ExternalUtranCellTDDOptionallyContainedNrmClass"/>
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

  <element
    name="ExternalUtranCellTDDHcr"
    substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
```

```
                <complexType>
                  <all>

                    <!--Inherited attributes from ExternalUtranGenericCell via ExternalUtranCellTDD-->
                    <element name="userLabel" type="string" minOccurs="0"/>
                    <element name="cId" type="un:cId" minOccurs="0"/>
                    <element name="mcc" type="string" minOccurs="0"/>
                    <element name="mnc" type="string" minOccurs="0"/>
                    <element name="rncId" type="string" minOccurs="0"/>
                    <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                    <element name="lac" type="un:lac" minOccurs="0"/>
                    <element name="rac" type="un:rac" minOccurs="0"/>
                    <element name="controllingRnc" type="xn:dn" minOccurs="0"/>
                    <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                    <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                    <element name="cellIndividualOffset" type="un:cellIndividualOffset"
                            minOccurs="0"/>
                    <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                    <element name="maximumAllowedUlTxPower" type="un:maximumAllowedUlTxPower"
                            minOccurs="0"/>
                    <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                    <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                    <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                    <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                    <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                    <element name="referenceTimeDifferenceToCell"
                            type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                    <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                    <element name="restrictionStateIndicator" type="un:restrictionStateIndicator"
                            minOccurs="0"/>
                    <element name="dpcModeChangeSupportIndicator"  type="un:dpcModeChangeSupport"
                            minOccurs="0"/>
                    <!-- End of inherited attributes from ExternalUtranGenericCell -->

                    <!-- Inherited attributes from ExternalUtranCellTDD -->
                    <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                    <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                    <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                    <element name="cellCapabilityContainerTDD"
                            type="un:cellCapabilityContainerTDD" minOccurs="0"/>
                    <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                    <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                    <!-- End of inherited attributes from ExternalUtranCellTDD -->

                    <element name="temporaryOffset1" type="un:temporaryOffset1" minOccurs="0"/>
                    <element name="syncCase" type="un:syncCase" minOccurs="0"/>
                    <element name="timeSlotForSch" type="un:timeSlotForSch" minOccurs="0"/>
                    <element name="schTimeSlot" type="un:schTimeSlot" minOccurs="0"/>
                    <element name="timeSlotHCRList" type="un:timeSlotHCRList" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
              <choice minOccurs="0" maxOccurs="unbounded">
                <element ref="un:ExternalUtranCellTDDHcrOptionallyContainedNrmClass"/>
                <element ref="xn:VsDataContainer"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>

    <element
      name="ExternalUtranCellTDDLcr"
      substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass"
    >
      <complexType>
        <complexContent>
          <extension base="xn:NrmClass">
            <sequence>
              <element name="attributes" minOccurs="0">
                <complexType>
                  <all>

                    <!--Inherited attributes from ExternalUtranGenericCell via ExternalUtranCellTDD-->
                    <element name="userLabel" type="string" minOccurs="0"/>
                    <element name="cId" type="un:cId" minOccurs="0"/>
                    <element name="mcc" type="string" minOccurs="0"/>
```

```xml
                        <element name="mnc" type="string" minOccurs="0"/>
                        <element name="rncId" type="string" minOccurs="0"/>
                        <element name="cellMode" type="un:cellMode" minOccurs="0"/>
                        <element name="lac" type="un:lac" minOccurs="0"/>
                        <element name="rac" type="un:rac" minOccurs="0"/>
                        <element name="controllingRnc" type="xn:dn" minOccurs="0"/>
                        <element name="hsFlag" type="un:hsFlag" minOccurs="0"/>
                        <element name="frameOffset" type="un:frameOffset" minOccurs="0"/>
                        <element name="cellIndividualOffset" type="un:cellIndividualOffset"
                                minOccurs="0"/>
                        <element name="hcsPrio" type="un:hcsPrio" minOccurs="0"/>
                        <element name="maximumAllowedUlTxPower" type="un:maximumAllowedUlTxPower"
                                minOccurs="0"/>
                        <element name="snaInformation" type="un:snaInformation" minOccurs="0"/>
                        <element name="qrxlevMin" type="un:qrxlevMin" minOccurs="0"/>
                        <element name="deltaQrxlevmin" type="un:deltaQrxlevmin" minOccurs="0"/>
                        <element name="qhcs" type="un:qhcs" minOccurs="0"/>
                        <element name="penaltyTime" type="un:penaltyTime" minOccurs="0"/>
                        <element name="referenceTimeDifferenceToCell"
                                type="un:referenceTimeDifferenceToCell" minOccurs="0"/>
                        <element name="readSFNIndicator" type="un:readSFNIndicator" minOccurs="0"/>
                        <element name="restrictionStateIndicator" type="un:restrictionStateIndicator"
                                minOccurs="0"/>
                        <element name="dpcModeChangeSupportIndicator"  type="un:dpcModeChangeSupport"
                                minOccurs="0"/>
                        <!-- End of inherited attributes from ExternalUtranGenericCell -->

                        <!-- Inherited attributes from ExternalUtranCellTDD -->
                        <element name="uarfcn" type="un:uarfcnAnyMode" minOccurs="0"/>
                        <element name="cellParameterId" type="un:cellParameterId" minOccurs="0"/>
                        <element name="primaryCcpchPower" type="un:primaryCcpchPower" minOccurs="0"/>
                        <element name="cellCapabilityContainerTDD"
                                type="un:cellCapabilityContainerTDD" minOccurs="0"/>
                        <element name="sctdIndicator" type="un:sctdIndicator" minOccurs="0"/>
                        <element name="dpchConstantValue" type="un:dpchConstantValue" minOccurs="0"/>
                        <!-- End of inherited attributes from ExternalUtranCellTDD -->

                        <element name="tstdIndicator" type="un:tstdIndicator" minOccurs="0"/>
                        <element name="timeSlotLCRList" type="un:timeSlotLCRList" minOccurs="0"/>
                     </all>
                  </complexType>
               </element>
               <choice minOccurs="0" maxOccurs="unbounded">
                 <element ref="un:ExternalUtranCellTDDLcrOptionallyContainedNrmClass"/>
                 <element ref="xn:VsDataContainer"/>
               </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
   </element>

<element
  name="ExternalRncFunction"
  substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass"
>
     <complexType>
       <complexContent>
         <extension base="xn:NrmClass">
           <sequence>
             <element name="attributes" minOccurs="0">
               <complexType>
                 <all>
                   <element name="userLabel" type="string" minOccurs="0"/>
                   <element name="mcc" type="string" minOccurs="0"/>
                   <element name="mnc" type="string" minOccurs="0"/>
                   <element name="rncId" type="string" minOccurs="0"/>
                   <element name="controlledCellList" type="xn:dnList" minOccurs="0"/>
                 </all>
               </complexType>
             </element>
             <choice minOccurs="0" maxOccurs="unbounded">
               <element ref="un:ExternalUtranCellFDD"/>
               <element ref="un:ExternalUtranCellTDDHcr"/>
               <element ref="un:ExternalUtranCellTDDLcr"/>
               <element ref="un:ExternalRncFunctionOptionallyContainedNrmClass"/>
               <element ref="xn:VsDataContainer"/>
             </choice>
```

```
              </sequence>
            </extension>
          </complexContent>
        </complexType>
      </element>

    <element name="EP_Iur">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClass">
            <sequence>
              <element name="attributes" minOccurs="0">
                <complexType>
                  <all>
                    <element name="connectedRncId" type="string" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>

    <element name="RncFunctionOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="NodeBFunctionOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranGenericCellOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranCellFDDOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranCellTDDOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranCellTDDLcrOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranCellTDDHcrOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="IubLinkOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="UtranRelationOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
    <element name="ExternalUtranGenericCellOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>
    <element name="ExternalUtranCellFDDOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>
    <element name="ExternalUtranCellTDDOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>
    <element name="ExternalUtranCellTDDHcrOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>
    <element name="ExternalUtranCellTDDLcrOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>
    <element name="ExternalRncFunctionOptionallyContainedNrmClass"
            type="xn:NrmClass" abstract="true"/>

</schema>
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Annex A (informative):
Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Cat**	**Old**	**New**
2012-10					First draft			0.1.0
2012-12	SA#58				Presented for information and approval		0.1.0	1.0.0
2012-12					New version after approval		1.0.0	11.0.0

History

Document history		
V11.0.0	January 2013	Publication