Technical Specification Group Services and System Aspects
Meeting #18, New Orleans, USA, 9-12 December 2002

TSGS#18(02)0748

Source: **SA5 (Telecom Management)**

Title: **Rel-5 CR 32.642 (UTRAN network resources IRP: Network Resource Model) : Inclusion of valid values and ranges for UTRAN Cell parameters**

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-1st-	Spec	CR	R	Phase	Subject	Cat	Version	Doc-2nd-	Workitem
SP-020748	32.642	006	-	Rel-5	Inclusion of valid values and ranges for UTRAN Cell parameters	F	5.0.0	S5-027005	OAM-NIM

3GPP TSG-SA5 (Telecom Management) **S5-027005**
Meeting #32, Vienna, Austria, 18 - 22 November 2002

CR-Form-v7

CHANGE REQUEST

⌘ **32.642** **CR** **006** ⌘**rev** **-** ⌘ Current version: **5.0.0** ⌘

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

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

Title:	⌘	Inclusion of valid values and ranges for UTRAN Cell parameters
Source:	⌘	SA5
Work item code:	⌘	OAM-NIM
Date:	⌘	22/11/2002
Category:	⌘	**F**
Release:	⌘	Rel-5

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	The current specification does not specify UTRAN radio parameter values and ranges.
Summary of change:	⌘	This CR contains a proposal for specifying value types and ranges for UTRAN radio parameters. These parameters are related to a UTRAN FDD Cell and their value types and ranges need to be included in the definition and legal values table of the UTRAN Network Resource Model.
Consequences if not approved:	⌘	Value type and range checking will not be possible for these parameters.

Clauses affected:	⌘	6.5.1.

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

⌘

Other comments: ⌘

Table 11: Attributes

Attribute Name	Definition	Legal Values
adjacentCell	It carries the DN of the UtranCelll or the ExternalUtranCell.	
bchPower	The power of the broadcast channel in the cell (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
cId	Cid is the identifier of a cell in one RNC (Ref. 3 GPP TS 25.401 [4]),], 3 GPP TS 25.433 [5]).	Type: Integral numeric value Range: (0…65535)
externalUtranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
iubLinkId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
lac	IOCs **UtranCell** and **ExternalUtranCell**: Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]). IOC **UtranRelation**: Location Area Code, LAC (Ref. 3 GPP TS 23.003 [3]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Integral numeric value Range: (1.. 65533, 65535)
localCellId	Local Cell id is used to uniquely identify the set of resources defined in a Node B to support a cell (as defined by a Cid Ref. 3 GPP TS 25.401 [4]), 3 GPP TS 25.433 [5]). It must be unique in Node B at a minimum, but may be unique in UTRAN. It can be used to tie the cell in the RNC to a specific set of resources in the Node B.	Type: Integral numeric value Range: (0…268435455)
maximumTransmissionPower	The maximum transmission power of a cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (0,..50 dBm) Steps of 0.1 dB
mcc	Mobile Country Code, MCC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
mnc	Mobile Network Code, MNC (part of the PLMN Id, Ref. 3 GPP TS 23.003 [3]).	
nodeBFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
primaryCpichPower	IOCs **UtranCell** and **ExternalUtranCell**: The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]). IOC **UtranRelation**: The power of the primary CPICH channel in the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Numeric value Range: (-10,..,50 dBm) Steps of 0.1 dB
primarySchPower	The power of the primary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15

Attribute Name	Definition	Legal Values
		dB) Steps of 0.1dB
primaryScramblingCode	IOCs **UtranCell** and **ExternalUtranCell**: The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]). IOC **UtranRelation**: The primary DL scrambling code used by the cell (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	Type: Integral numeric value Range: (0 – 511)
rac	Routing Area Code, RAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0..255)
relationType	Type of relation: e.g. Intersystem relation, intrafrequency intrasystem relation, interfrequency intrasystem relation.	
rncFunctionId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
rncId	IOC **ExternalUtranCell**: Unique RNC ID for the drift RNC (Ref. 3 GPP TS 23.003 [3]). IOC **RncFunction**: Unique RNC ID (Ref. 3 GPP TS 23.003 [3])	
sac	Service Area Code, SAC (Ref. 3 GPP TS 23.003 [3]).	Type: Integral numeric value Range: (0.. 65535)
secondarySchPower	The power of the secondary synchronisation channel in the cell, DL Power (Ref. 3 GPP TS 25.433 [5]).	Type: Numeric value Range: (-35..+15 dB) Steps of 0.1dB
uarfcnDl	IOCs **UtranCell** and **ExternalUtranCell**: The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). IOC **UtranRelation**: The DL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]), for another UTRAN cell or the external UTRAN Cell that is broadcast in the system information in the Cell.	The channel number should correspond to a frequency in the downlink band, range 2110 MHz – 2170 MHz, or 1930 MHz – 1990 MHz for ITU Region 2. (Ref. 3GPP TS 25.101). Type: Integral numeric value

Attribute Name	Definition	Legal Values
		Range: (10562 - 10838) or (9662 - 9938)
uarfcnUl	IOCs **UtranCell** and **ExternalUtranCell**: The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]). IOC **UtranRelation**: The UL UTRA absolute Radio Frequency Channel number, UARFCN (Ref. 3 GPP TS 25.433 [5]) for another UTRAN cell or the external UTRAN Cell, that is broadcast in the system information in the Cell	The channel number should correspond to a frequency in the uplink band, range 1920 MHz – 1980 MHz, or 1850 MHz - 1910 MHz for ITU Region 2. (Ref. 3GPP TS 25.101) Type: Integral numeric value Range: (9612 - 9888) or (9262 – 9538)
ura	UTRAN Registration Area, URA (Ref. 3 GPP TS 25.423 [6]).	Type: Integral numeric value Range: (0..65535)
userLabel	A user-friendly (and user assigned) name of the associated object. Inherited from ManagedFunction.	
utranCellId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	
utranRelationId	An attribute whose "name+value" can be used as an RDN when naming an instance of this object class. This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	

6.5.2 Constraints

None.

6.6 Particular information configurations

Not applicable.

Annex A (informative):
Supported UTRAN network configurations

Figure A.1 depicts four typical network configurations, which are supported by the UTRAN NRM over the Itf-N. However, this does not preclude support for other configurations.

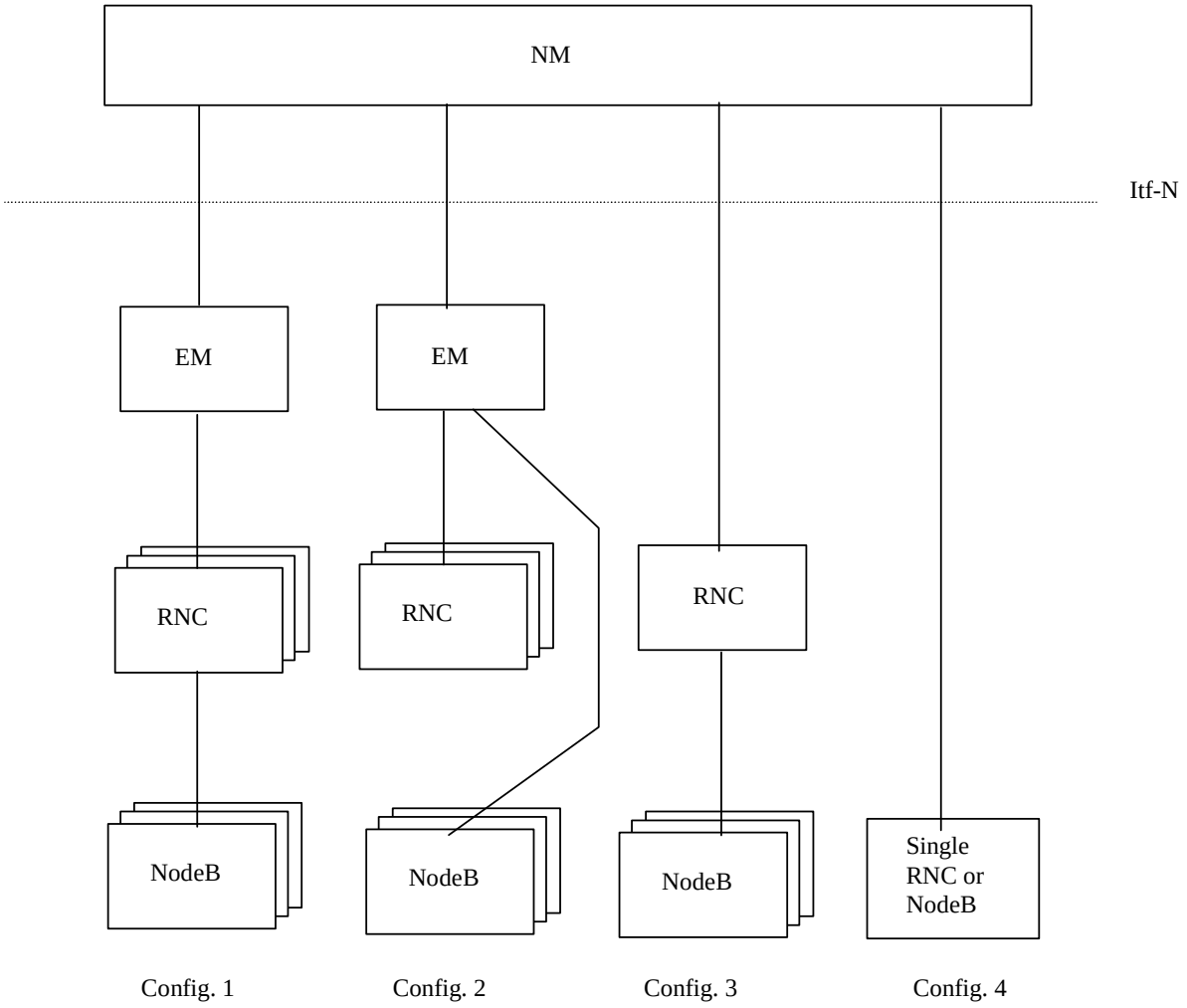

Figure A.1: Typical network configurations supported by the UTRAN NRM

Table A.1 shows the possible number of instances for each network configuration (counted from left to right in figure A.1.):

Table A.1: Number of instances for each example configuration in figure A.1

MOC	Config. 1	Config. 2	Config. 3	Config. 4
SubNetwork	1	1	1	0..1
ManagementNode	1	1	0	0
ManagedElement	1..N	1..N	1..N	1
MeContext	0..M	0..M	0..M	0..1
RncFunction	0..P	0..P	0..1	0..1
NodeBFunction	0..Q	0..Q	0..(N-1)	0..1
IubLink	0..Q	0..Q	0..(N-1)	0
UtranCell	0..R	0..R	0..R	0..R
IRPAgent	1	1	1	1
NotificationIRP	1	1	1	1
AlarmIRP	0..1	0..1	0..1	0..1
BasicCmIRP	0..1	0..1	0..1	0..1

Annex B (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2001	S_12	SP-010283	--	--	Approved at TSG SA #12 and placed under Change Control	2.0.0	4.0.0
Jun 2002	S_16	SP-020303	001	--	Corrections of reference in figure 6.2 and of attribute descriptions in UtranRelation in 32.642 (UTRAN network resources IRP: NRM)	4.0.0	4.1.0
Jun 2002	S_16	SP-020304	002	--	Correction of supported IRP in system context	4.0.0	4.1.0
Sep 2002	S_17	SP-020490	003	--	UML corrections	4.1.0	4.2.0
Sep 2002	S_17	SP-020492	004	--	Add the new IRP IS methodology defined in 32.102	4.2.0	5.0.0
Sep 2002	S_17	SP-020492	005	--	Add State Management	4.2.0	5.0.0